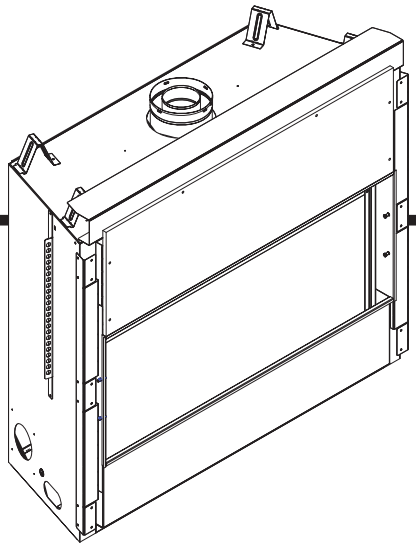
HEAT & GLO™

No one builds a better fire

Owner's Manual

Installation and Operation



Model:
SLR (Cosmo)

GAS-FIRED

c UL us LISTED

NOTICE

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

⚠ WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury, or death.

- **DO NOT** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **What to do if you smell gas**
  - **DO NOT** try to light any appliance.
  - **DO NOT** touch any electrical switch. **DO NOT** use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the manufactured home construction and safety standard, *Title 24 CFR, Part 3280* or *Standard for Installation in Mobile Homes, CAN/CSA Z240MH, in Canada.*

This appliance is only for use with the type(s) of gas indicated on the rating plate.

⚠ WARNING

HOT SURFACES!
Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.
- **DO NOT** touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away

- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.

See Table of Contents for location of additional Commonwealth of Massachusetts requirements.

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory trained professionals, or technicians supervised by an NFI certified professional.

Read this manual before installing or operating this appliance.
Please retain this owner's manual for future reference.

A. Congratulations

Congratulations on selecting a Heat & Glo gas fireplace, an elegant and clean alternative to wood burning fireplaces. The Heat & Glo gas fireplace you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new fireplace, you'll want to read and carefully follow all of the instructions contained in this owner's manual. Pay special attention to all cautions and warnings.

This owner's manual should be retained for future reference. We suggest that you keep it with your other important documents and product manuals.

The information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

Your new Heat & Glo gas fireplace will give you years of durable use and trouble-free enjoyment. Welcome to the Heat & Glo family of fireplace products!

Homeowner Reference Information

We recommend that you record the following pertinent information about your fireplace.

Model Name: _____ Date purchased/installed: _____

Serial Number: _____ Location on fireplace: _____

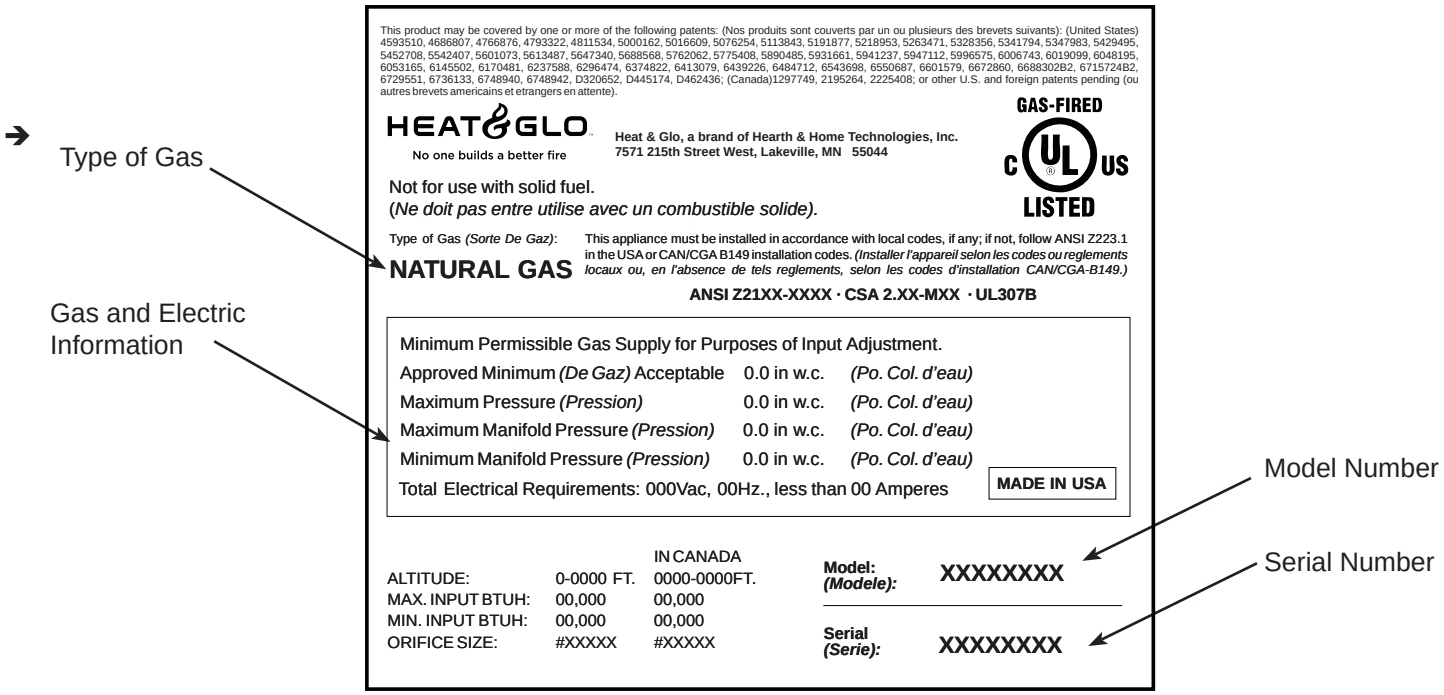
Dealership purchased from: _____ Dealer Phone: _____

Notes: _____

_____

Listing Label Information/Location

The model information regarding your specific fireplace can be found on the rating plate usually located in the control area of the fireplace.


Type of Gas
Gas and Electric Information
Model Number
Serial Number
This product may be covered by one or more of the following patents: (Nos produits sont couverts par un ou plusieurs des brevets suivants): (United States) 4593510, 4686907, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, D320652, D445174, D462436; (Canada)1297749, 2195264, 2225408; or other U.S. and foreign patents pending (ou autres brevets americains et etrangers en attente).
HEAT&GLO
No one builds a better fire
Heat & Glo, a brand of Hearth & Home Technologies, Inc.
7571 215th Street West, Lakeville, MN 55044
GAS-FIRED
C UL US
LISTED
Not for use with solid fuel.
(Ne doit pas entre utilise avec un combustible solide).
Type of Gas (Sorte De Gaz):
NATURAL GAS
This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 in the USA or CAN/CGA B149 installation codes. (Installer l'appareil selon les codes ou reglements locaux ou, en l'absence de tels reglements, selon les codes d'installation CAN/CGA-B149.)
ANSI Z21XX-XXXX · CSA 2.XX-MXX · UL307B
Minimum Permissible Gas Supply for Purposes of Input Adjustment.
Approved Minimum (De Gaz) Acceptable 0.0 in w.c. (Po. Col. d'eau)
Maximum Pressure (Pression) 0.0 in w.c. (Po. Col. d'eau)
Maximum Manifold Pressure (Pression) 0.0 in w.c. (Po. Col. d'eau)
Minimum Manifold Pressure (Pression) 0.0 in w.c. (Po. Col. d'eau)
Total Electrical Requirements: 000Vac, 00Hz., less than 00 Amperes
MADE IN USA
IN CANADA
ALTITUDE: 0-0000 FT. 0000-0000FT.
MAX. INPUT BTUH: 00,000 00,000
MIN. INPUT BTUH: 00,000 00,000
ORIFICE SIZE: #XXXXX #XXXXX
Model: (Modele): XXXXXXXX
Serial (Serie): XXXXXXXX

⚠ Safety Alert Key:

- ***DANGER!*** *Indicates a hazardous situation which, if not avoided will result in death or serious injury.*
- ***WARNING!*** *Indicates a hazardous situation which, if not avoided could result in death or serious injury.*
- ***CAUTION!*** *Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.*
- ***NOTICE:*** *Used to address practices not related to personal injury.*

Table of Contents

A. Congratulations 2
B. Limited Lifetime Warranty 5

1 Listing and Code Approvals

A. Appliance Certification 7
B. Tempered Glass Specifications 7
C. BTU Specifications 7
D. High Altitude Installations 7
E. Non-Combustible Materials Specification 7
F. Combustible Materials Specification 7
G. Electrical Codes 7
H. Requirements for the Commonwealth of Massachusetts . . 8

User Guide

2 Operating Instructions

A. Gas Fireplace Safety 9
B. Your Fireplace 9
C. Clear Space 10
D. Decorative Doors and Fronts 10
E. Fixed Glass Assembly 10
F. Remote Controls, Wall Controls and Wall Switches 10
G. Before Lighting Fireplace 10
H. Lighting Instructions (IPI) 11
I. After Fireplace is Lit 12
J. Frequently Asked Questions 12

3 Maintenance and Service

A. Maintenance Tasks-Homeowner 13
B. Maintenance Tasks-Qualified Service Technician 14

Installer Guide

4 Getting Started

A. Typical Appliance System 15
B. Design and Installation Considerations 16
C. Tools and Supplies Needed 16
D. Inspect Appliance and Components 16

5 Framing and Clearances

A. Selecting Appliance Location 17
B. Constructing the Appliance Chase 18
C. Clearances 18
D. Mantel and Wall Projections 19

6 Termination Locations

A. Vent Termination Minimum Clearances 21

7 Vent Information and Diagrams

A. Approved Pipe 23
B. Vent Table Key 23
C. Use of Elbows 23
D. Measuring Standards 23
E. Vent Diagrams 23

8 Vent Clearances and Framing

A. Pipe Clearances to Combustibles 32
B. Wall Penetration Framing 32
C. Install the Ceiling Firestop 33
D. Install Attic Insulation Shield 34

9 Appliance Preparation

A. Top Vent 35
B. Securing and Leveling the Appliance 36

10 Installing Vent Pipe (SLP Pipe)

A. Assemble Vent Sections 37
B. Assemble Slip Sections 38
C. Secure The Vent Sections 38
D. Disassemble Vent Sections 39
E. Install Decorative Ceiling Components 39
F. Install Metal Roof Flashing 40
G. Assemble and Install Storm Collar 40
H. Install RF4-8 41
I. Install Vertical Termination Cap 42
J. Install Decorative Wall Components 42
K. Heat Shield Requirements for Horizontal Termination . . . 42
L. Install Horizontal Termination Cap 43

11 Gas Information

A. Fuel Conversion 44
B. Gas Pressure 44
C. Gas Connection 45
D. High Altitude Installations 45

12 Electrical Information

A. Wiring Requirements 46
B. Intellifire Ignition System Wiring 46
C. Optional Accessories Requirements 46
D. Electrical Service and Repair 47
E. Junction Box Installation 47

13 Finishing

A. Framing and Finishing Instructions 48
B. Mantel and Wall Projections 51
C. Facing Material 52
D. Decorative Fronts 54

14 Appliance Setup

A. Remove Fixed Glass Assembly 55
B. Remove the Shipping Materials 55
C. Clean the Appliance 55
D. Accessories 55
E. Rock Media Instructions 56
F. Fixed Glass Assembly 58
G. Install the Mesh 58
H. Air Shutter Setting 58

15 Troubleshooting

A. Intellifire Ignition System 59

16 Reference Materials

A. Appliance Dimension Diagram 61
B. Vent Components Diagrams 62
C. Service Parts List 66
D. Contact Information 68

➔ = Contains updated information.

B. Limited Lifetime Warranty

Hearth & Home Technologies LIMITED WARRANTY

Hearth & Home Technologies ("HHT") and its respective brands extends the following warranty for HHT gas, wood, pellet and electric appliances purchased from an authorized HHT dealer and installed in the United States of America or Canada. Warranty starts with date of purchase by the original owner (End User) except as noted for replacement parts.

Warranty Period		HHT Manufactured Appliances and Venting						Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Electric	Venting	
1 Year		X	X	X	X	X	X	All Parts and Material Except as covered by Conditions, Exclusion, and Limitations listed
2 years				X	X			Igniters, Electronic Components, and Glass
		X	X	X	X			Blowers
			X					Molded Refractory Panels
3 years				X				Firepots
5 years	3 years			X	X			Castings & Baffles
7 years	3 years		X	X	X			Firebox, HHT Chimney, Termination & Heat Exchanger
10 years	1 year	X						Burners, Logs & Refractory
Limited Lifetime	1 year	X						Firebox & Heat Exchanger
90 Days		X	X	X	X	X	X	All Replacement Parts
See Conditions, Exclusions, and limitations. 9-01-08								

CONDITIONS, EXCLUSIONS & LIMITATION OF LIABILITY

- This warranty applies to the original owner and is transferable up to two years from date of purchase to the new homeowner, provided the purchase was made through an authorized dealer or distributor of HHT, and the appliance remains in its original place of installation.
- The maximum amount recoverable under this warranty is limited to the purchase price of the product.
- In no event shall HHT be liable for any incidental or consequential damages caused by defects in the product.
- Adjustments, regular maintenance, cleaning and temporary repairs, or the failure to duplicate the problem in the home is not covered under this warranty.

B. Limited Lifetime Warranty *(continued)*

- This limited warranty does not extend to or include surface finish on the appliance or terminations, door gasketing, glass gasketing, glass discoloration, firebrick, pellet logs, kaowool or other ceramic insulating materials. Rust and/or corrosion on any of the metal surfaces, cast iron components, baffles, firepots, doors, or firebox area are not covered by this warranty.
- Noise resulting from minor expansion, contraction, or movement of certain parts is normal and complaints related to this noise are not covered by this warranty.
- HHT's obligation under this warranty does not extend to damages resulting from: (1) installation, operation or maintenance of the appliance not in accordance with the installation instructions; operating instructions and the listing agent identification label furnished with the appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure or handling devices such as exhaust fans or forced air furnaces or other such causes; (5) use of fuels other than those specified in the operating instructions; (6) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; and/or (7) modification of the appliance not expressly authorized and approved by HHT in writing.
- This warranty does not apply to non-HHT venting components, hearth components or other accessories used in conjunction with the installation of this product.
- This warranty is void if the appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals the appliance is subject to prolonged periods of dampness or condensation, or there is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.
- HHT's liability under this warranty is limited to the replacement and repair of defective components or workmanship during the applicable period. HHT may fully discharge all of its obligations under such warranties by repairing the defective component(s) at HHT's discretion. Shipping costs are not covered under this warranty.
- Some states do not allow exclusions or limitation of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state.
- EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY SPECIFIED ABOVE.

This Limited Warranty is effective on all HHT appliances sold after September 01, 2008 and supersedes any and all warranties currently in existence.

If warranty service is needed, you should contact your installing dealer. If the installing dealer is unable to provide necessary parts or components, contact the nearest authorized HHT dealer or supplier.

1 Listing and Code Approvals

A. Appliance Certification

MODEL: **SLR**

LABORATORY: **Underwriters Laboratories, Inc. (UL)**

TYPE: **Vented Gas Fireplace Heater**

STANDARD: **ANSI Z21.88a-2007 CSA 2.33a-2007 Vented Gas Fireplace Heaters**

This product is listed to ANSI standards for "Vented Gas Fireplace Heaters" and applicable sections of "Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles", and "Gas Fired Appliances for Use at High Altitudes".

NOTICE: *This installation must conform with local codes. In the absence of local codes you must comply with the National Fuel Gas Code, ANSI Z223.1-latest edition in the U.S.A. and the CAN/CGA B149 Installation Codes in Canada.*

NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE. This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

B. Tempered Glass Specifications

Hearth & Home Technologies appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the Consumer Product Safety Commission (CPSC). The tempered glass has been tested and certified to the requirements of **ANSI Z97.1** and **CPSC 16 CFR 1202** (Safety Glazing Certification Council **SGCC# 1595** and **1597**. Architectural Testing, Inc. Reports **02-31919.01** and **02-31917.01**).

This statement is in compliance with **CPSC 16 CFR Section 1201.5** "Certification and labeling requirements" which refers to **15** U.S. Code **(USC) 2063** stating "…Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered."

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

C. BTU Specifications

Models *(U.S. or Canada)*		**Maximum Input BTU/h**	**Minimum Input BTU/h**	**Orifice Size (DMS)**
SLR (NG)	*US (0-2000 FT)*	26,000	N/A	#42
	CANADA (2000-4500 FT)	21,870	N/A	#43
SLR (LP)	*US (0-2000 FT)*	25,000	N/A	.057
	CANADA (2000-4500 FT)	23,500	N/A	#54

D. High Altitude Installations

NOTICE: *If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.*

When installing above 2000 feet elevation:

- In the USA: Reduce input rate 4% for each 1000 feet above 2000 feet.
- In CANADA: Reduce input rate 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

Check with your local gas utility to determine proper orifice size.

E. Non-Combustible Materials Specification

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

Materials that are reported as passing **ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 ºC** and **UL763** shall be considered non-combustible materials.

F. Combustible Materials Specification

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or plastered or unplastered shall be considered combustible materials.

G. Electrical Codes

NOTICE: *This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with* **National Electric Code ANSI/NFPA 70-latest edition** *or the* **Canadian Electric Code CSA C22.1.**

- A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.

Note: The following requirements reference various Massachusetts and national codes not contained in this document.

H. Requirements for the Commonwealth of Massachusetts

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

Installation of Carbon Monoxide Detectors

At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.
In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) in. in size, **"GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".**

Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

Exemptions

The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

- The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System NOT Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

- The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

See Gas Connection section for additional Commonwealth of Massachusetts requirements.

A. Gas Fireplace Safety

⚠ WARNING

HOT SURFACES!
Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.
- **DO NOT** touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away

- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

If you expect that small children or vulnerable adults may come into contact with this fireplace, the following precautions are recommended:

- Install a physical barrier such as:
  - A decorative firescreen.
  - Adjustable safety gate.
- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.
- Never leave children alone near a hot fireplace, whether operating or cooling down.
- Teach children to NEVER touch the fireplace.
- Consider not using the fireplace when children will be present.

Contact your dealer for more information, or visit: www.hpba.org/staysafe.

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacations, trips, etc):

- Remove batteries from remote controls.
- Turn off wall controls.
- Unplug 3 volt adapter plug and remove batteries on IPI models.

B. Your Fireplace

WARNING! DO NOT operate fireplace before reading and understanding operating instructions. *Failure to operate fireplace according to operating instructions could cause fire or injury.*

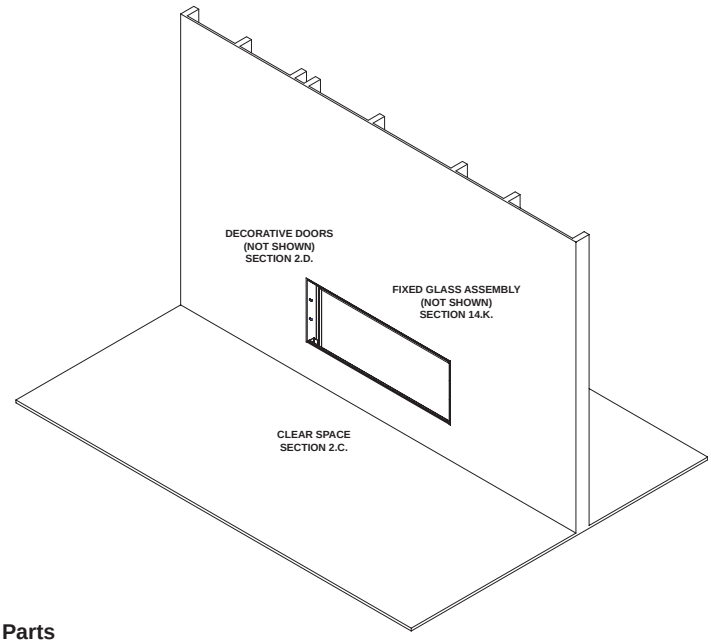


Figure 2.1 General Operating Parts

C. Clear Space

WARNING! DO NOT *place combustible objects in front of the fireplace or block louvers. High temperatures may start a fire. See Figure 2.2.*

Avoid placing candles and other heat-sensitive objects on mantel or hearth. Heat may damage these objects.

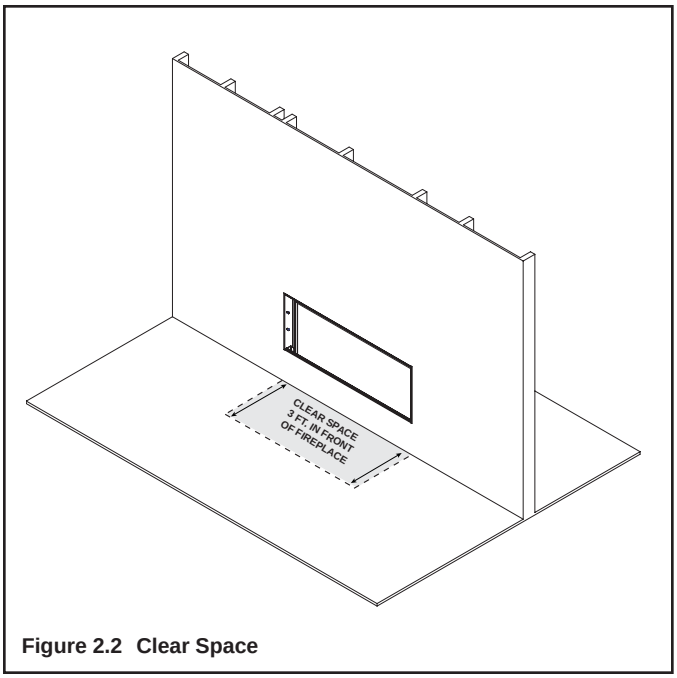


Figure 2.2 Clear Space

D. Decorative Doors and Fronts

WARNING! Risk of Fire! *Install ONLY doors or fronts approved by Hearth & Home Technologies. Unapproved doors or fronts may cause fireplace to overheat.*

This decorative front has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the fireplace with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

For more information refer to the instructions supplied with your decorative door or front.

E. Fixed Glass Assembly

See Section 14.F.

F. Remote Controls, Wall Controls and Wall Switches

Follow the instructions supplied with the control installed to operate your fireplace:

For safety:

- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.

See your dealer if you have questions.

G. Before Lighting Fireplace

Before operating this fireplace for the first time, **have a qualified service technician**:

- Verify all shipping materials have been removed from inside and/or underneath the firebox.
- Review proper placement of logs, ember material and/or other decorative materials.
- Check the wiring.
- Check the air shutter adjustment.
- Ensure that there are no gas leaks.
- Ensure that the glass is sealed and in the proper position and that the integral barrier is in place.

WARNING! Risk of Fire or Asphyxiation! DO NOT *operate fireplace with fixed glass assembly removed.*

H. Lighting Instructions (IPI)

The IPI system may be operated with two D-cell batteries. When using batteries, unplug the transformer. To prolong battery life, remove them when using the transformer.

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. **DO NOT** try to light the burner by hand.

B. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- **DO NOT** try to light any appliance.
- **DO NOT** touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. DO NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

WARNING:

DO NOT CONNECT 110 VAC TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

If not installed, operated, and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or fuel combustion which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

CAUTION:

Hot while in operation. **DO NOT** touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

DO NOT operate the appliance with fixed glass assembly removed, cracked or broken. Replacement of the fixed glass assembly should be done by a licensed or qualified service person.

NOT FOR USE WITH SOLID FUEL

For use with natural gas and propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this appliance to the alternate fuel.

Also Certified for Installation in a Bedroom or a Bedsitting Room.

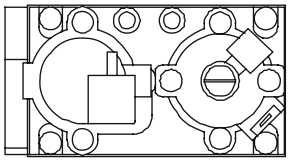
For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

For additional information on operating your
Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

LIGHTING INSTRUCTIONS (IPI)

1. Turn off all electric power to the appliance.
2. This appliance is equipped with an ignition device which automatically lights the burner. **DO NOT** try to light the burner by hand.

GAS VALVE



3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the left side of this label. If you do not smell gas, go to next step.
4. Turn on all electric power to the appliance.
5. To light the burner, flip the ON/OFF switch to the "ON" position. (The ON/OFF switch may include a wall switch if so equipped).
6. If the appliance will not operate, follow the instructions "To Turn Off Gas to Appliance" and call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

1. Turn wall control or ON/OFF switch to "OFF".
2. Turn off all electric power to the appliance if service is to be performed.

593-913F

Final inspection by _____

I. After Fireplace is Lit

Initial Break-in Procedure

- The fireplace should be run three to four hours continuously on high.
- Turn the fireplace off and allow it to completely cool.
- Remove fixed glass assembly. See Section 14.F.
- Clean fixed glass assembly. See Section 3.
- Replace the fixed glass assembly and run continuously on high an additional 12 hours.

This cures the materials used to manufacture the fireplace.

NOTICE! Open windows for air circulation during fireplace break-in.

- *Some people may be sensitive to smoke and odors.*
- *Smoke detectors may activate.*

J. Frequently Asked Questions

ISSUE	SOLUTIONS
Condensation on the glass	This is a result of gas combustion and temperature variations. As the fireplace warms, this condensation will disappear.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the fireplace is allowed to burn for 20 to 40 minutes.
Odor from fireplace	When first operated, this fireplace may release an odor for the first several hours. This is caused by the curing of materials from manufacturing. Odor may also be released from finishing materials and adhesives used near the fireplace. These circumstances may require additional curing related to the installation environment.
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning. A non-abrasive cleaner such as gas appliance glass cleaner may be necessary. See your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the fireplace.
Rock noise	There may be some “cracking” noise coming from the fireplace during the first few heating and cooling cycles. This noise is associated with settling rock and some minor cracking of larger pieces of rock. This will lessen over time as the glass rock is conditioned to the heating and cooling temperature changes.
Rocks falling through basepan	It is expected that a few small pieces (approximately 10 pieces) of rock may fall through the basepan and come to rest on the fireplace bottom. This has no affect on fireplace performance.

3 Maintenance and Service

Any safety screen or guard removed for servicing must be replaced prior to operating the fireplace.

When properly maintained, your fireplace will give you many years of trouble-free service. We recommend annual service by a qualified service technician.

A. Maintenance Tasks-Homeowner

Installation and repair should be done by a qualified service technician only. The fireplace should be inspected before use and at least annually by a professional service person.

The following tasks may be performed annually by the homeowner. If you are uncomfortable performing any of the listed tasks, please call your dealer for a service appointment.

More frequent cleaning may be required due to lint from carpeting or other factors. Control compartment, burner and circulating air passageway of the fireplace must be kept clean.

CAUTION! Risk of Burns! *The fireplace should be turned off and cooled before servicing.*

Glass Cleaning

Frequency: Seasonally

By: Homeowner

Tools Needed: Protective gloves, glass cleaner, drop cloth and a stable work surface.

CAUTION! Handle fixed glass assembly with care. *Glass is breakable.*

- *Avoid striking, scratching or slamming glass*
- *Avoid abrasive cleaners*
- ***DO NOT*** *clean glass while it is hot*

- Prepare a work area large enough to accommodate fixed glass assembly and door frame by placing a drop cloth on a flat, stable surface.

Note: Fixed glass assembly and gasketing may have residue that can stain carpeting or floor surfaces.

- Remove door or decorative front from fireplace and set aside on work surface.
- See Section 14.F for instructions to remove fixed glass assembly.
- Clean glass with a non-abrasive commercially available cleaner.
  - Light deposits: Use a soft cloth with soap and water
  - Heavy deposits: Use commercial fireplace glass cleaner (consult with your dealer)
- Refer to Section 14F for glass removal and replacement instructions.
- Reinstall door or decorative front.

Doors, Surrounds, Fronts

Frequency: Annually

By: Homeowner

Tools needed: Protective gloves, stable work surface

- Assess condition of screen and replace as necessary.
- Inspect for scratches, dents or other damage and repair as necessary.
- Check that louvers are not blocked.
- Vacuum and dust surfaces.

Remote Control

Frequency: Seasonally

By: Homeowner

Tools needed: Replacement batteries and remote control instructions.

- Locate remote control transmitter and receiver.
- Verify operation of remote. Refer to remote control operation instructions for proper calibration and setup procedure.
- Place batteries as needed in remote transmitters and battery-powered receivers.
- Place remote control out of reach of children.

If not using your fireplace for an extended period of time (summer months, vacations/trips, etc), to prevent unintended operation:

- Remove batteries from remote controls.
- Unplug 3 volt adapter plug on IPI models.

Venting

Frequency: Seasonally

By: Homeowner

Tools needed: Protective gloves and safety glasses.

- Inspect venting and termination cap for blockage or obstruction such plants, bird nests, leaves, snow, debris, etc.
- Verify termination cap clearance to subsequent construction (building additions, decks, fences, or sheds). See Section 6.
- Inspect for corrosion or separation.
- Verify weather stripping, sealing and flashing remains intact.
- Inspect draft shield to verify it is not damaged or missing.

B. Maintenance Tasks-Qualified Service Technician

The following tasks must be performed by a qualified service technician.

Gasket Seal and Glass Assembly Inspection

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, drop cloth and a stable work surface.

- Inspect gasket seal and its condition.
- Inspect fixed glass assembly for scratches and nicks that can lead to breakage when exposed to heat.
- Confirm there is no damage to glass or glass frame. Replace as necessary.
- Verify that fixed glass assembly is properly retained and attachment components are intact and not damaged. Replace as necessary.

Firebox

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, sandpaper, steel wool, cloths, mineral spirits, primer and touch-up paint.

- Inspect for paint condition, warped surfaces, corrosion or perforation. Sand and repaint as necessary.
- Replace fireplace if firebox has been perforated.

Control Compartment and Firebox Top

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, vacuum cleaner, dust cloths

- Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.
- Remove all foreign objects.
- Verify unobstructed air circulation.

Burner Ignition and Operation

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, vacuum cleaner, whisk broom, flashlight, voltmeter, indexed drill bit set, and a manometer.

- Verify burner is properly secured and aligned with pilot or igniter.
- Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
- Verify batteries have been removed from battery back-up IPI systems to prevent premature battery failure or leaking.
- Check for smooth lighting and ignition carryover to all ports. Verify that there is no ignition delay.
- Inspect for lifting or other flame problems.
- Verify air shutter setting is correct. See Section 14.H for required air shutter setting. Verify air shutter is clear of dust and debris.
- Inspect orifice for soot, dirt and corrosion. Verify orifice size is correct. See Service Parts List for proper orifice sizing.
- Verify manifold and inlet pressures. Adjust regulator as required.
- Inspect pilot flame pattern and strength. See Figure 3.1 for proper pilot flame pattern. Clean or replace orifice spud as necessary.
- Inspect IPI flame sensing rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required.
- Verify IPI millivolt output. Replace as necessary.
- Verify that there is not a short in flame sense circuit by checking continuity between pilot hood and flame sense rod. Replace pilot as necessary.

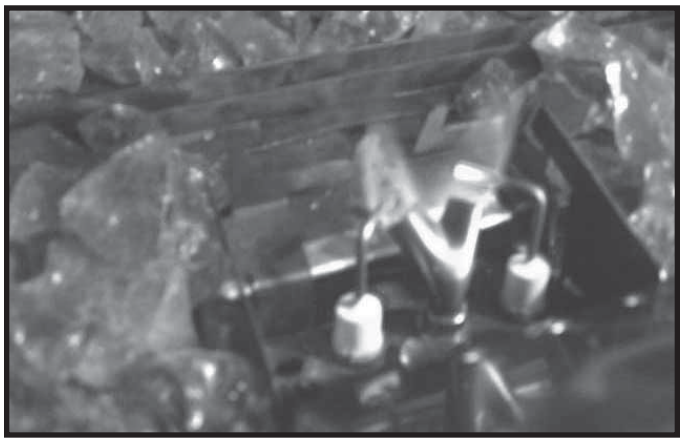


Figure 3.1 IPI Pilot Flame Pattern

A. Typical Appliance System

NOTICE: *Illustrations and photos reflect typical installations and are for design purposes only. Illustrations/diagrams are not drawn to scale. Actual product may vary from pictures in manual*

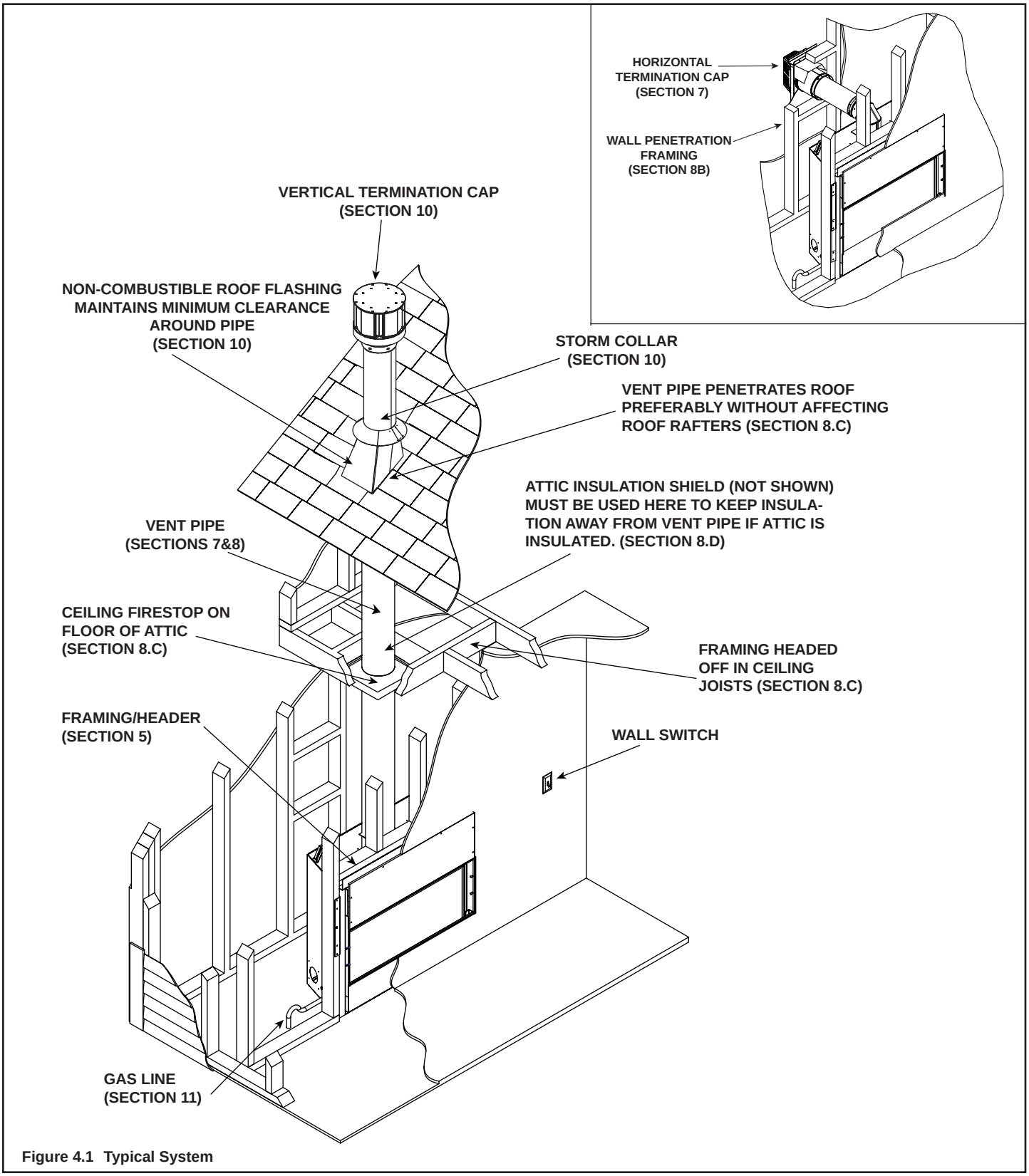

HORIZONTAL TERMINATION CAP (SECTION 7)
WALL PENETRATION FRAMING (SECTION 8B)
VERTICAL TERMINATION CAP (SECTION 10)
NON-COMBUSTIBLE ROOF FLASHING MAINTAINS MINIMUM CLEARANCE AROUND PIPE (SECTION 10)
STORM COLLAR (SECTION 10)
VENT PIPE PENETRATES ROOF PREFERABLY WITHOUT AFFECTING ROOF RAFTERS (SECTION 8.C)
ATTIC INSULATION SHIELD (NOT SHOWN) MUST BE USED HERE TO KEEP INSULATION AWAY FROM VENT PIPE IF ATTIC IS INSULATED. (SECTION 8.D)
VENT PIPE (SECTIONS 7&8)
CEILING FIRESTOP ON FLOOR OF ATTIC (SECTION 8.C)
FRAMING HEADED OFF IN CEILING JOISTS (SECTION 8.C)
FRAMING/HEADER (SECTION 5)
WALL SWITCH
GAS LINE (SECTION 11)

Figure 4.1 Typical System

B. Design and Installation Considerations

Heat & Glo direct vent gas appliances are designed to operate with all combustion air siphoned from outside of the building and all exhaust gases expelled to the outside. No additional outside air source is required.

Installation MUST comply with local, regional, state and national codes and regulations. Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

Before installing, determine the following:

- Where the appliance is to be installed.
- The vent system configuration to be used.
- Gas supply piping.
- Electrical wiring requirements.
- Framing and finishing details.
- Whether optional accessories—devices such as a wall switch or remote control—are desired.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified service technician, service agency or your dealer.

C. Tools and Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

Tape measure	Framing material
Pliers	High temperature caulking material
Hammer	Phillips screwdriver (magnetic)
Gloves	Framing square
Voltmeter	Electric drill and bits (1/4 in. magnetic)
Plumb line	Safety glasses
Level	Reciprocating saw
Manometer	Flat blade screwdriver

Non-corrosive leak check solution

1/2 - 3/4 in. length, #6 or #8 Self-drilling screws

One 1/4 in. female connection (for optional fan).

D. Inspect Appliance and Components

- Carefully remove the appliance and components from the packaging.
- The vent system components and decorative doors and fronts may be shipped in separate packages.
- If packaged separately, the log set and appliance grate must be installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- **Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**

WARNING! Risk of Fire or Explosion! *Damaged parts could impair safe operation.* ***DO NOT i****nstall damaged, incomplete or substitute components. Keep appliance dry.*

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance or vent system component.
- Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

WARNING! Risk of Fire, Explosion or Electric Shock! ***DO NOT*** *use this appliance if any part has been under water. Call a qualified service technician to inspect the appliance and to replace any part of the control system and/or gas control which has been under water.*

5 Framing and Clearances

A. Selecting Appliance Location

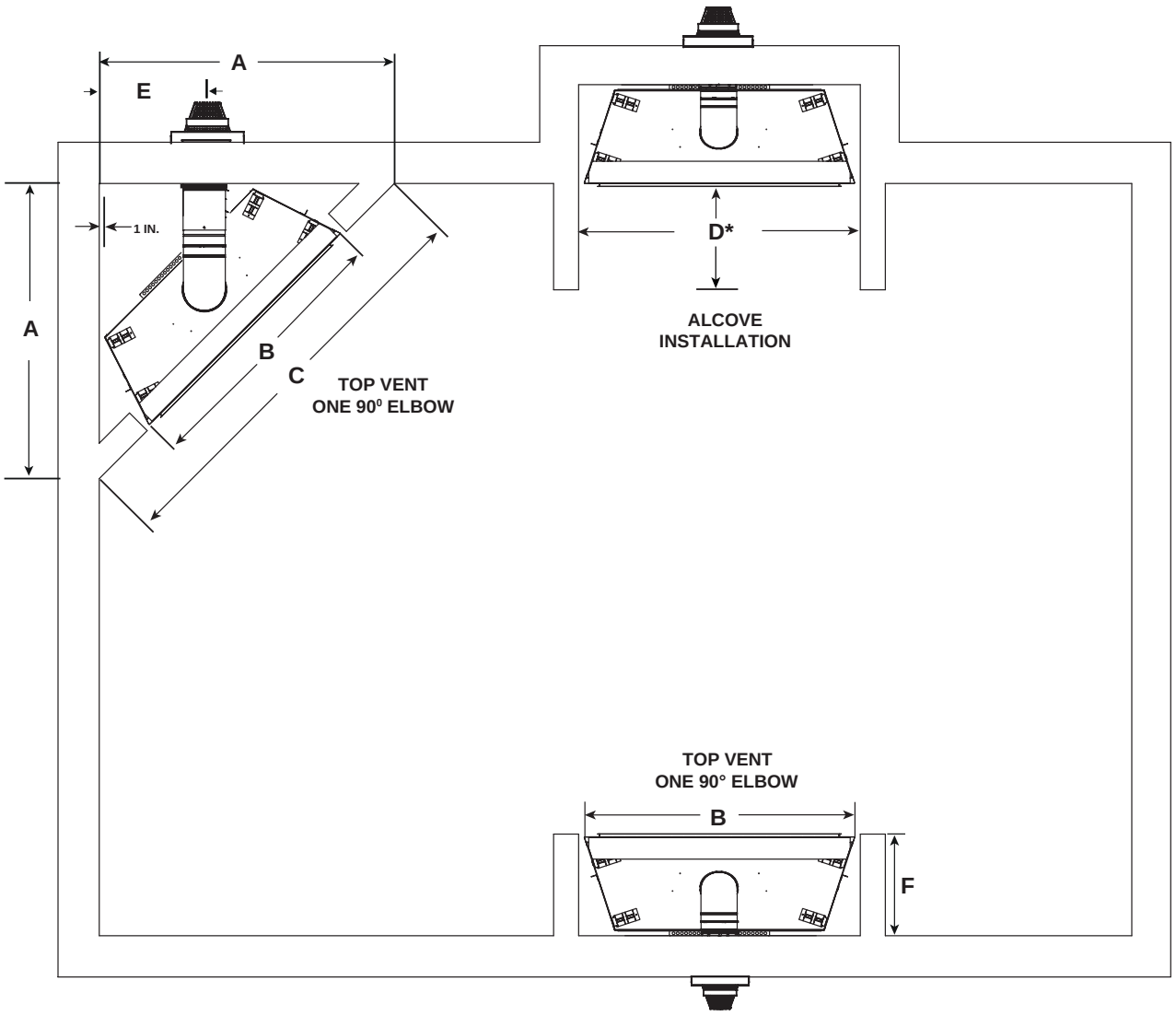
When selecting a location for the appliance it is important to consider the required clearances to walls (see Figure 5.1).

WARNING! Risk of Fire or Burns! *Provide adequate clearance around air openings and for service access.* ***Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.***

NOTICE: *Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY. Illustrations/diagrams are not drawn to scale. Actual installation may vary due to individual design preference.*

It is important to follow the framing and finishing instructions step by step to ensure proper placement of fireplace in the surrounding framing/finishing materials.

Unlike many traditional, single sided Heat & Glo fireplaces, the SLR is recessed into surround framing. The left and right nailing tabs were designed to ensure the fireplace is recessed to the correct location within the framing materials. Refer to Section 13 for detailed instructions on finishing.



	A	B	C	D	E	F
Inches	53-1/32	48	75	See Section D. Figure 5.5 & 5.6	19-9/32	17-3/4
Millimeters	1347	1218	1905		490	451

Figure 5.1 Appliance Locations

B. Constructing the Appliance Chase

A chase is a vertical box-like structure built to enclose the gas appliance and/or its vent system. In cooler climates the vent should enclosed inside the chase.

NOTICE: *Treatment of ceiling firestops and wall shield firestops and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Therefore, you MUST check local building codes to determine the requirements to these steps.*

Chases should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner.

Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, in regions where cold air infiltration may be an issue, the inside surfaces may be sheetrocked and taped for maximum air tightness.

To further prevent drafts, the wall shield and ceiling firestops should be caulked with high temperature caulk to seal gaps. Gas line holes and other openings should be caulked with high temp caulk or stuffed with unfaced insulation. If the appliance is being installed on a cement slab, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

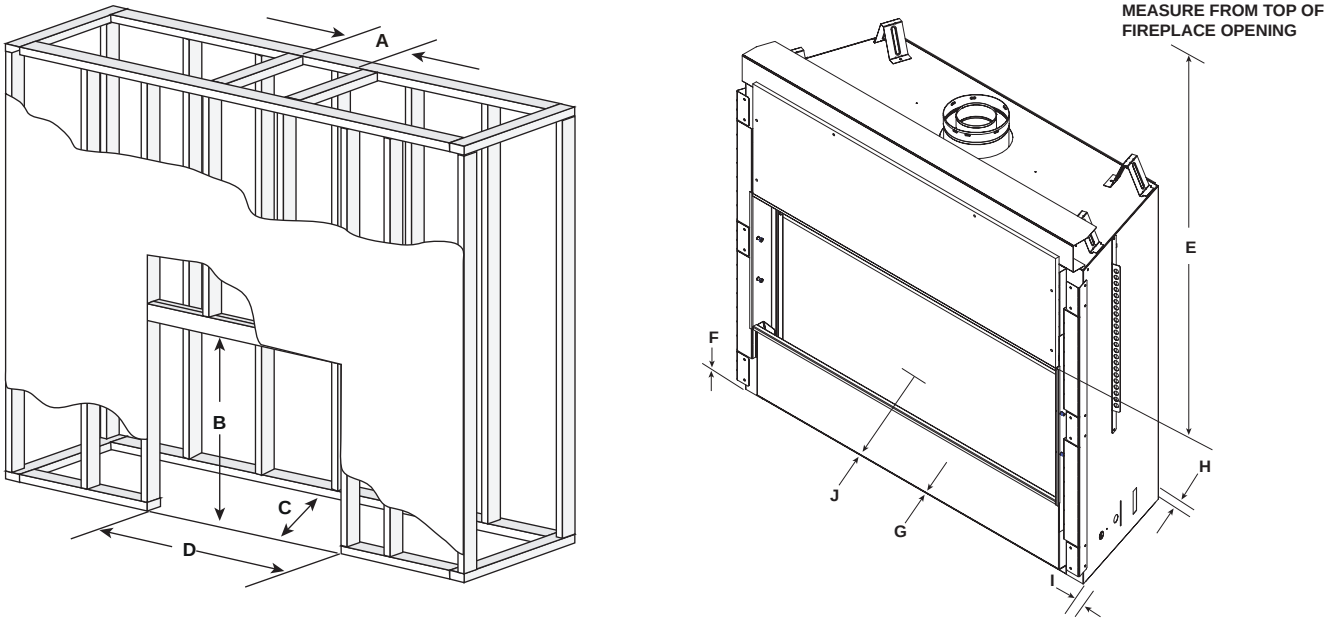
C. Clearances

NOTICE: *Install appliance on hard metal or wood surfaces extending full width and depth.* ***DO NOT*** *install directly on carpeting, vinyl, tile or any combustible material other than wood.*

WARNING! Risk of Fire! *Maintain specified air space clearances to appliance and vent pipe:*

- Insulation and other materials must be secured to prevent accidental contact.
- The chase must be properly blocked to prevent blown insulation or other combustibles from entering and making contact with fireplace or chimney.
- Failure to maintain airspace may cause overheating and a fire.

Note: Figure 5.2 shows the fireplace installed on the floor. However, this fireplace can be elevated off the floor provided that the fireplace is properly supported by framing materials and the ceiling clearances are maintained.



MINIMUM FRAMING DIMENSIONS*										
	A	B	C	D	E	F	G	H	I	J
	Rough Opening (Vent Pipe)	Rough Opening (Height)	Rough Opening (Depth)	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	Behind Appliance	Sides of Appliance	Front of Appliance
Inches	8-5/8	42 1/4	18-1/4	50	31	0	0	1	1	36
Millimeters	219	1073	464	1270	787	0	0	25	25	914

Figure 5.2. Clearances to Combustibles

D. Mantel and Wall Projections

WARNING! Risk of Fire! *Comply with all minimum clearances to combustibles as specified. Framing or finishing material closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc).*

Combustible Mantels

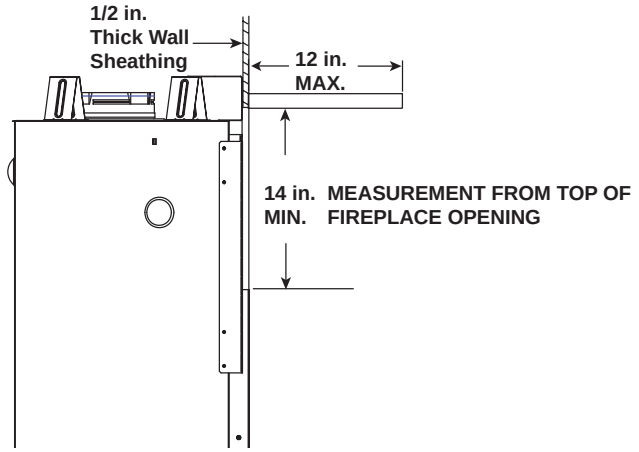


Figure 5.3 Clearances To Combustible Mantels Or Other Combustibles Above Appliance

Non-combustible Mantels

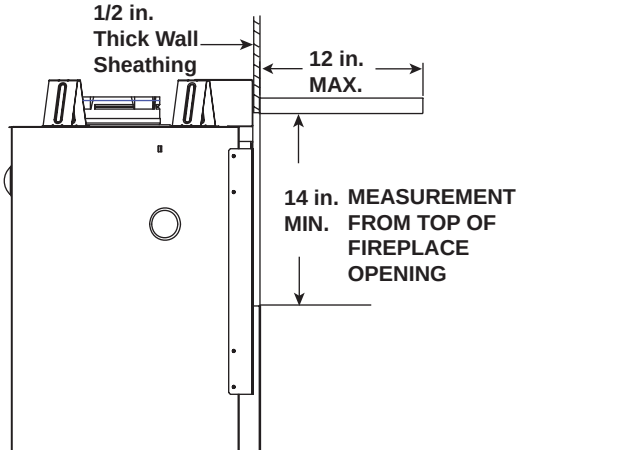


Figure 5.4 Clearances To Non-Combustible Mantels Or Other Non-Combustibles Above Appliance

Note: For non-combustible fireplace finish material (marble, stone, etc) specifications refer to Figure 13.13 and Figure 13.15.

Combustible Mantel Legs Or Wall Projections Extending Past The Face Of The Fireplace

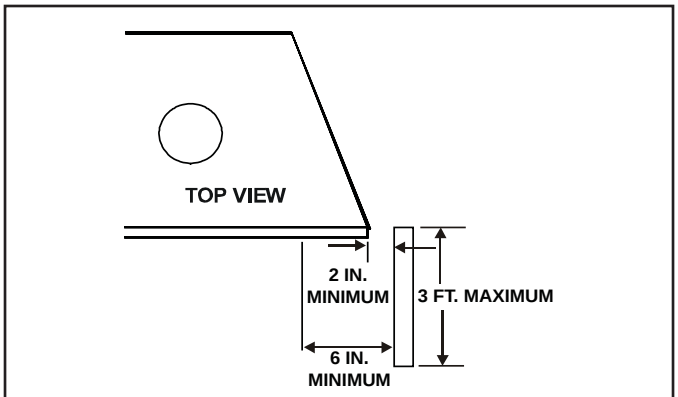


Figure 5.5 Combustible Mantel Leg or Wall Projections (Acceptable on both sides of opening)

Non-combustible Mantel Legs Or Wall Projections Extending Past The Face Of The Fireplace

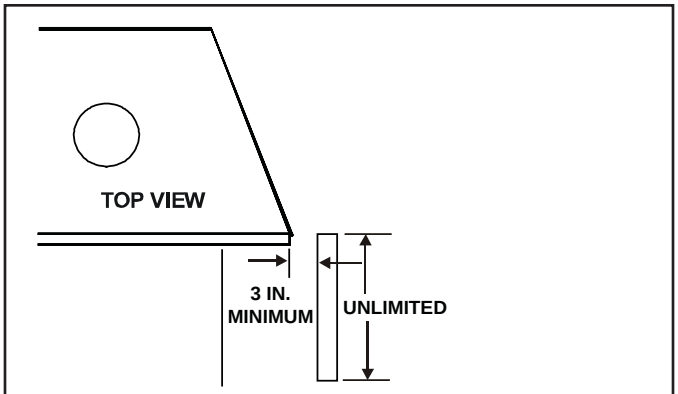


Figure 5.6 Non-Combustible Mantel Leg or Wall Projections (Acceptable on both sides of opening)

Front Side Finishing Detail

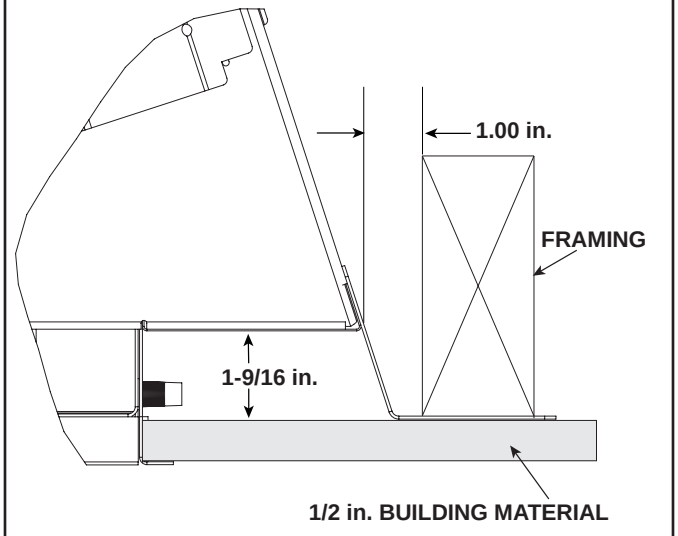


Figure 5.7 Front Side Finishing Detail

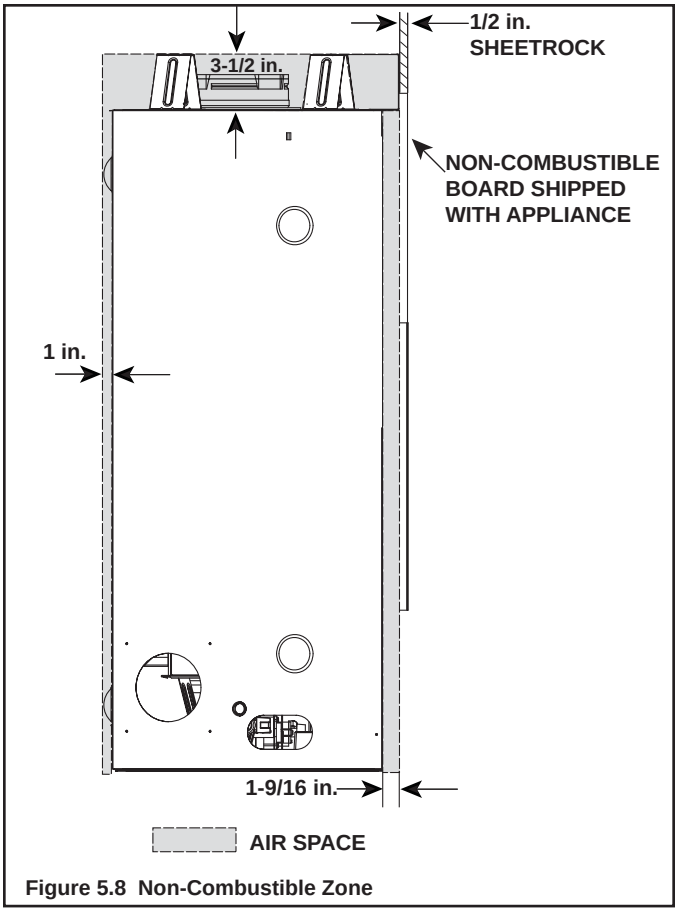


Figure 5.8 Non-Combustible Zone

6 Termination Locations

A. Vent Termination Minimum Clearances

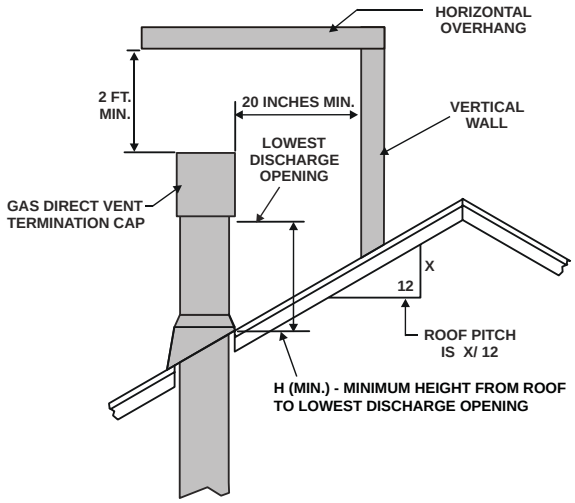
⚠ WARNING

Fire Risk.

Maintain vent clearance to combustibles as specified.

- **DO NOT** pack air space with insulation or other materials.

Failure to keep insulation or other materials away from vent pipe may cause overheating and fire.

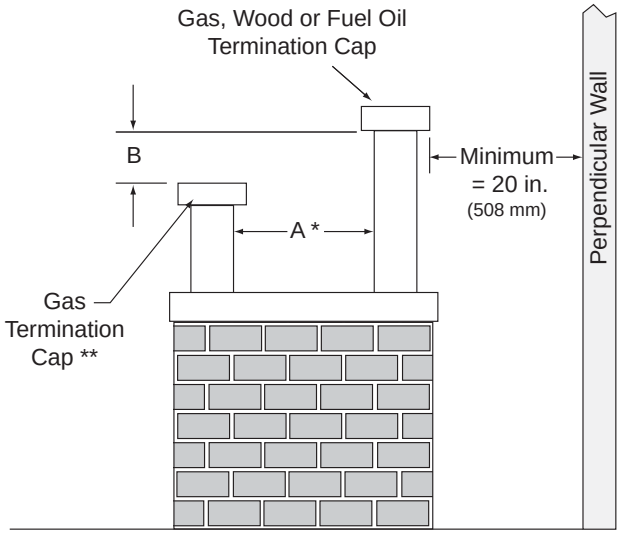


Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0*
Over 6/12 to 7/12	1.25*
Over 7/12 to 8/12	1.5*
Over 8/12 to 9/12	2.0*
Over 9/12 to 10/12	2.5
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0
Over 12/12 to 14/12	5.0
Over 14/12 to 16/12	6.0
Over 16/12 to 18/12	7.0
Over 18/12 to 20/12	7.5
Over 20/12 to 21/12	8.0

* 3 foot minimum in snow regions

Figure 6.1 Minimum Height From Roof To Lowest Discharge Opening

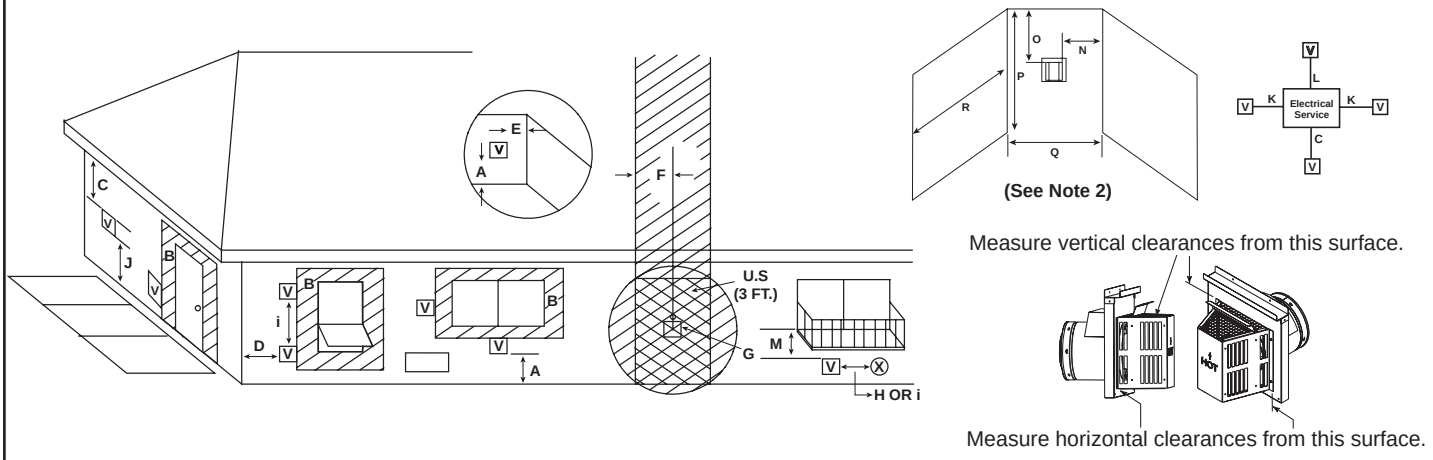
A	B
6 in. (minimum) up to 20 in. *152 mm/508 mm*	18 in. minimum *457 mm*
20 in. and over	0 in. minimum



* If using decorative cap cover(s), this distance may need to be increased. Refer to the installation instructions supplied with the decorative cap cover.

** In a staggered installation with both gas and wood terminations, the wood termination cap must be higher than the gas termination cap.

Figure 6.2 Staggered Termination Caps



V = VENT TERMINAL **X = AIR SUPPLY INLET** **= AREA WHERE TERMINAL IS NOT PERMITTED**

A = 12 inches (See Note 1) .....clearances above grade, veranda, porch, deck or balcony

B = 12 inches.....clearances to window or door that may be opened, or to permanently closed window. (Glass)

C = 18 inches.....vertical clearance to unventilated soffit or to ventilated soffit located above the terminal

30 inches .....for vinyl clad soffits and below electrical service

D = 9 inches.....clearance to outside corner

E = 6 inches.....clearance to inside corner

F = 3 ft. (Canada).....not to be installed above a gas meter/regulator assembly within 3 feet (90 cm) horizontally from the center-line of the regulator

G = 3 ft.....clearance to gas service regulator vent outlet

H = 9 inches (U.S.A.)
12 inches (Canada) (See Note 2) clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance

i = 3 ft. (U.S.A.)
6 ft. (Canada) (See Note 2).....clearance to a mechanical (powered) air supply inlet

J** = 7 ft. (See Note 1) ..... clearance above paved sidewalk or a paved driveway located on **public** property

K = 6 inches (See Note 5).....clearance from sides of electrical service

L = 12 inches (See Note 5).....clearance above electrical service

Covered Alcove Applications

M*** = 18 inches .....clearance under veranda, porch, deck, balcony or overhang

42 inches ..... vinyl

N = 6 inches ..... non-vinyl sidewalls

12 inches ..... vinyl sidewalls

O = 18 inches ..... non-vinyl soffit and overhang

42 inches ..... vinyl soffit and overhang

P = 8 ft.

	Q_{MIN}	R_{MAX}
1 cap	3 feet	2 x Q_{ACTUAL}
2 caps	6 feet	1 x Q_{ACTUAL}
3 caps	9 feet	2/3 x Q_{ACTUAL}
4 caps	12 feet	1/2 x Q_{ACTUAL}

Q_{MIN} = # termination caps x 3 R_{MAX} = (2 / # termination caps) x Q_{ACTUAL}

** a vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.

*** only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor, or meets Note 2.

Note 1: On private property where termination is less than 7 feet above a sidewalk, driveway, deck, porch, veranda or balcony, use of a listed cap shield is suggested. (See vents components page)

Note 2: Termination in a covered alcove space (spaces open only on one side and with an overhang) are permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. **1**. There must be 3 feet minimum between termination caps. **2.** All mechanical air intakes within 10 feet of a termination cap must be a minimum of 3 feet below the termination cap. **3.** All gravity air intakes within 3 feet of a termination cap must be a minimum of 1 foot below the termination cap.

Note 3: Local codes or regulations may require different clearances.

Note 4: Termination caps may be hot. Consider their proximity to doors or other traffic areas.

Note 5: Location of the vent termination must not interfere with access to the electrical service.

In the U.S and Canada: Vent system termination is **NOT** permitted in screened porches.

Vent system termination is permitted in porch areas with two or more sides open. You must follow all side walls, overhang and ground clearances as stated in the instructions.

Heat & Glo assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

Figure 6.3 Minimum Clearances for Termination

CAUTION: IF EXTERIOR WALLS ARE FINISHED WITH VINYL SIDING, IT IS SUGGESTED THAT A VINYL PROTECTOR KIT BE INSTALLED.

7 Vent Information and Diagrams

A. Approved Pipe

This appliance is approved for use with Hearth & Home Technologies SLP venting systems. Refer to Section 16B for vent component information.

DO NOT mix pipe, fittings or joining methods from different manufacturers.

The pipe is tested to be run inside an enclosed wall. There is no requirement for inspection openings at each joint within the wall.

WARNING! Risk of Fire or Asphyxiation. *This appliance requires a separate vent.* ***DO NOT*** *vent to a pipe serving a separate solid fuel burning appliance.*

NOTICE: *The SLP-HRC-SS and SLP-HRC-ZC-SS termination caps are NOT approved for use with propane fuel.*

B. Vent Table Key

The abbreviations listed in this vent table key are used in the vent diagrams.

Symbol	Description
V_1	First section (closest to appliance) of vertical length
V_2	Second section of vertical length
H_1	First section (closest to appliance) of horizontal length
H_2	Subsequent sections of horizontal length

C. Use of Elbows

Diagonal runs have both vertical and horizontal vent aspects when calculating the effects. Use the rise for the vertical aspect and the run for the horizontal aspect (see Figure 7.1).

Two 45º elbows may be used in place of one 90º elbow. On 45º runs, one foot of diagonal is equal to 8-1/2 in. (216 mm) horizontal run and 8-1/2 in. (216 mm) vertical run. A length of straight pipe is allowed between two 45º elbows (see Figure 7.1).

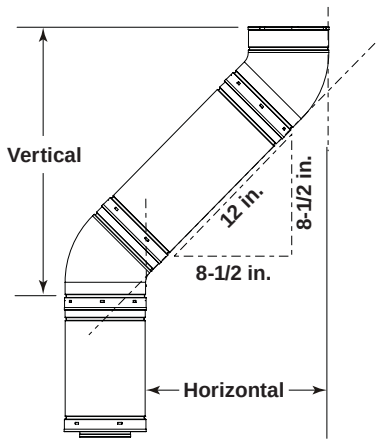


Figure 7.1

D. Measuring Standards

Vertical and horizontal measurements listed in the vent diagrams were made using the following standards.

- Pipe measurements are shown using the effective length of pipe (see Figure 7.2).
- Measurements are made from the appliance outer wrap, not from the standoffs.
- Horizontal terminations are measured to the outside mounting surface (flange of termination cap).
- Vertical terminations are measured to bottom of termination cap.
- Horizontal pipe installed level with no rise.

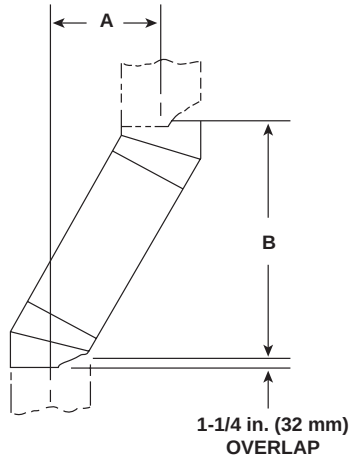
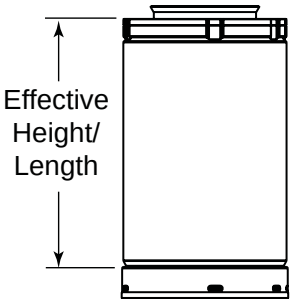


Figure 7.2 Chimney Offset/Return



Effective Height/Length

Pipe	*inches*	*mm*
SLP4	4	102
SLP6	6	152
SLP12	12	305
SLP24	24	610
SLP36	36	914
SLP48	48	1219
SLP6A	2 - 6	51 - 152
SLP12A	2 - 12	51 - 305

Figure 7.3 SLP Pipe Effective Length

E. Vent Diagrams

General Rules:

- When penetrating a combustible wall, a wall shield firestop must be installed.
- When penetrating a combustible ceiling, a ceiling firestop must be installed.
- Horizontal runs of vent do not require vertical rise; horizontal runs may be level.

⚠ WARNING

Fire Risk. Explosion Risk.

Do NOT pack insulation or other combustibles between ceiling firestops.

- ALWAYS maintain specified clearances around venting and firestop systems.
- Install wall shield and ceiling firestops as specified.

Failure to keep insulation or other material away from vent pipe may cause fire.

Top Vent - Horizontal Termination
Venting with 1 elbow

V Minimum		H_1 Maximum	
		SLR	
90 Elbow		1-1/2 ft.	610 mm
1 ft.	305 mm	3 ft.	914 mm
2 ft.	610 mm	5 ft.	1.5 m
3 ft.	914 mm	7 ft.	2.1 m
4 ft.	1.2 m	14 ft.	4.3 m
H MAX. =14 ft. (4.3 m) V + H MAX. = 40 ft. (12.2 m)			

Note: Use SLP Series components only.

Note: There MUST be a 25% reduction in total H when using flex vent except when using the simple up and out installation (see Figure 7.3).

Note: The SLP-HRC-SS and SLP-HRC-ZC-SS termination caps are not approved for use with propane (LP) fuel.

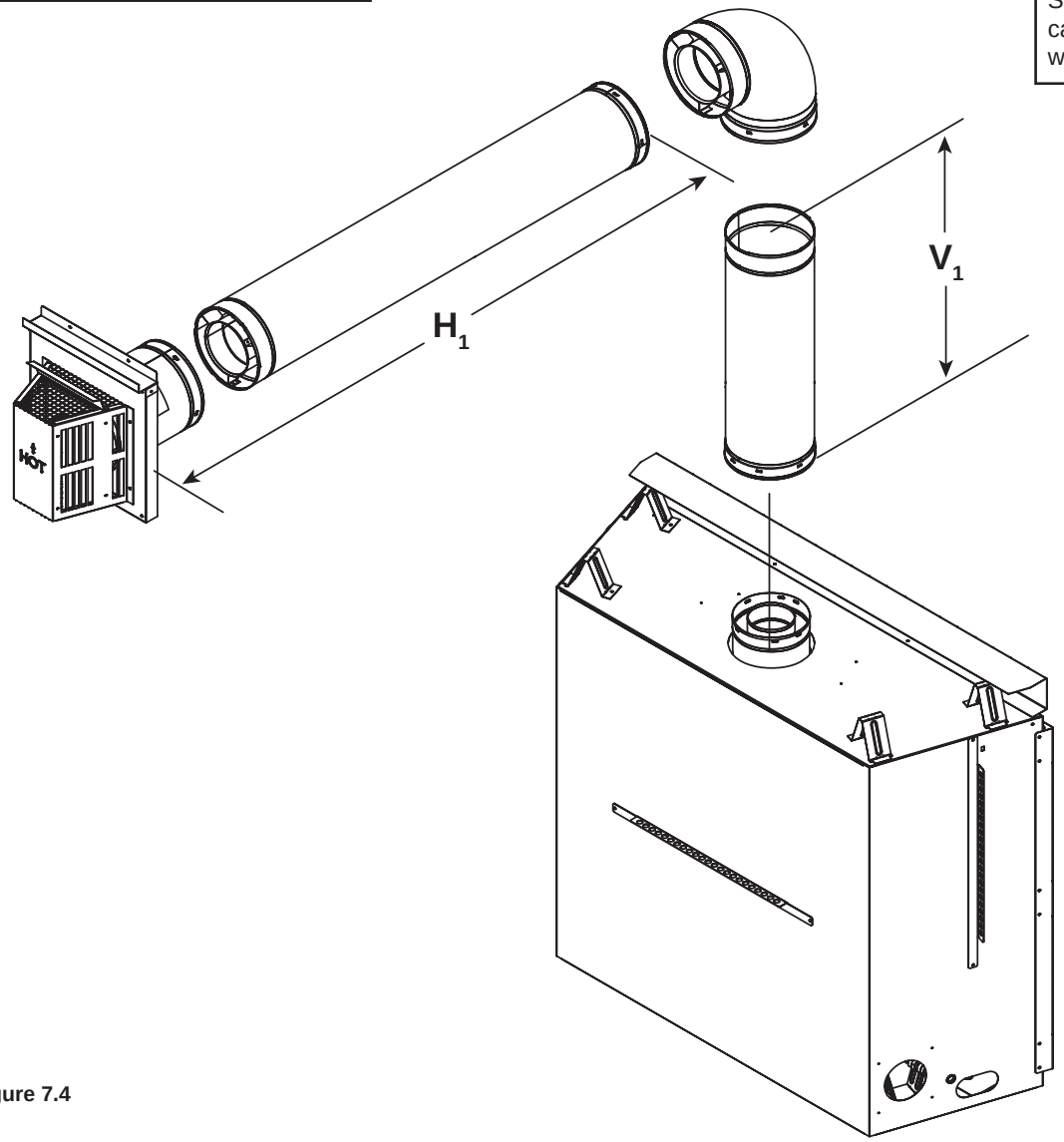


Figure 7.4

Top Vent - Horizontal Termination
Venting with 2 elbows

V Minimum		$H_1 + H_2$ MAXIMUM SLR	
90° Elbow		1 ft.	305 mm
1 ft.	305 mm	2 ft.	610 mm
2 ft.	610 mm	4 ft.	1.2 m
3 ft.	914 mm	6 ft.	1.8 m
4 ft.	1.2 m	14 ft.	4.3 m
$H + H_1$ MAX. =14 ft. (4.3 m) $V + H + H_1$ MAX. = 40 ft. (12.2 m)			

Note: Use SLP Series components only.

Note: There MUST be a 25% reduction in total H when using flex vent except when using the simple up and out installation (see Figure 7.3).

Note: The SLP-HRC-SS and SLP-HRC-ZC-SS termination caps are not approved for use with propane (LP) fuel.

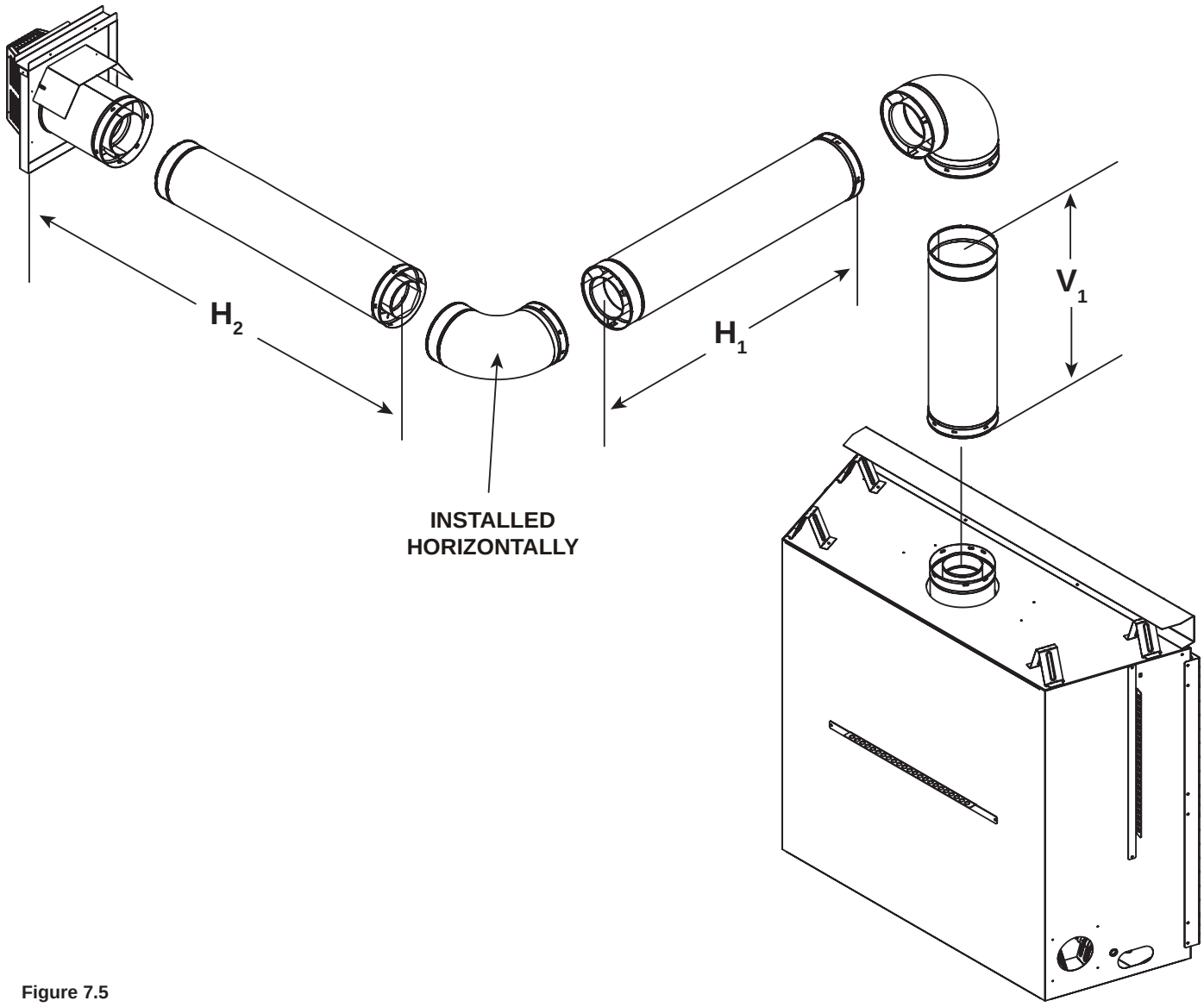


Figure 7.5

1. Top Vent - Horizontal Termination - *(continued)*

Top Vent - Horizontal Termination
Venting with 3 elbows

SLR					
V_1 Minimum		$H_1 + H_2$ Maximum		V_2	$V_1 + V_2$ Minimum
90° Elbow		6 ft.	1.8 m	*	*
1 ft.	305 mm	10 ft.	3.0 m	*	*
2 ft.	610 mm	12 ft.	3.7 m	*	*
3 ft.	914 mm	14 ft.	4.3 m	*	*
$H_1 + H_2$ MAX. =14 ft. (4.3 m) $V_1 + V_2 + H_1 + H_2$ MAX. = 40 ft. (12.2 m) *No specific restrictions on this value EXCEPT $V_1 + V_2$ + H cannot exceed 40 ft. (12.2 m)					

Note: Use SLP Series components only.

Note: There MUST be a 25% reduction in total H when using flex vent except when using the simple up and out installation (see Figure 7.3).

Note: The SLP-HRC-SS and SLP-HRC-ZC-SS termination caps are not approved for use with propane (LP) fuel.

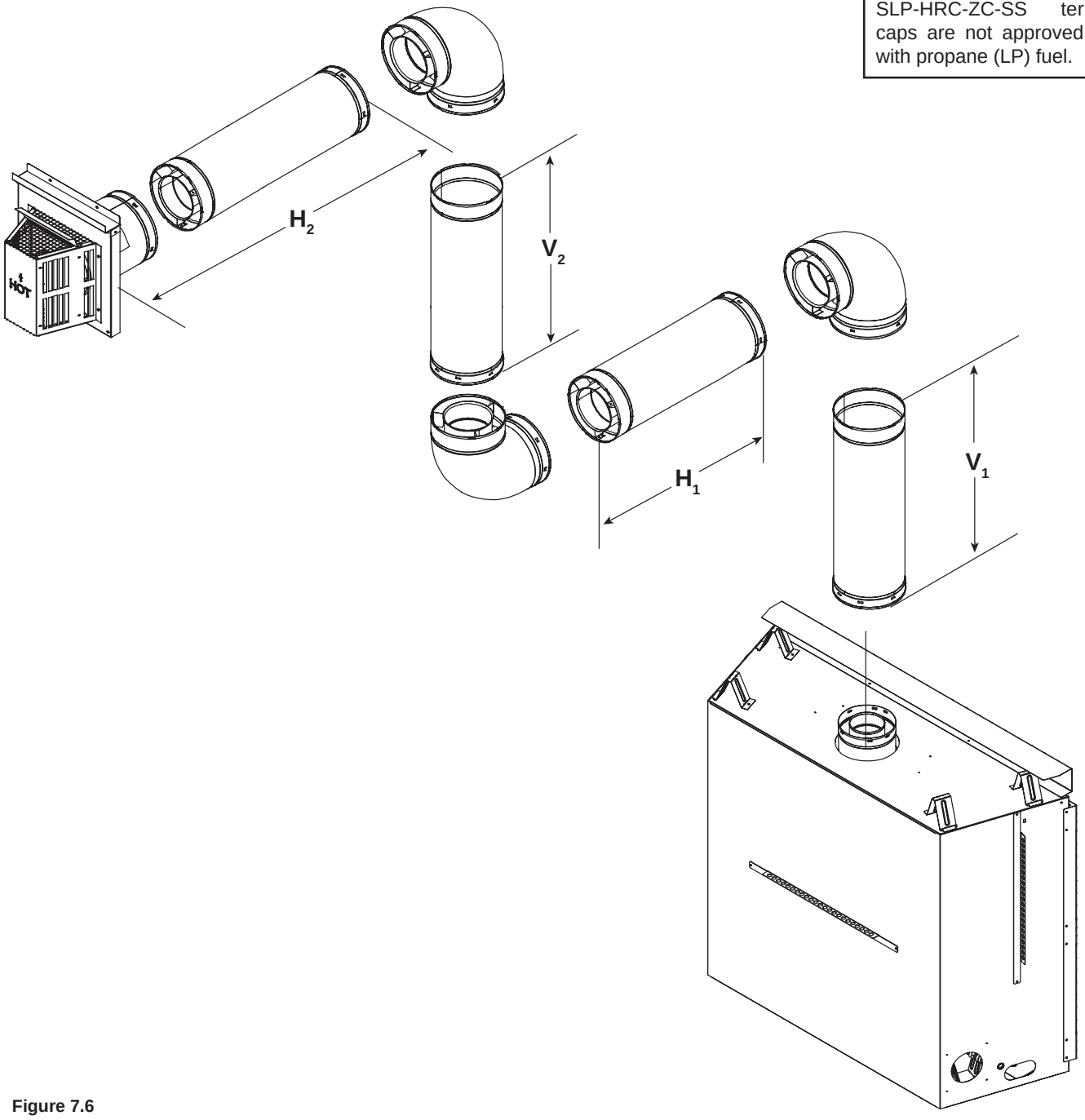


Figure 7.6

Top Vent - Horizontal Termination
Venting with 3 elbows

V Minimum		$H_1 + H_2 + H_3$ MAXIMUM SLR (NG ONLY)	
90° Elbow		ft.	mm
3 ft.	914 mm	15 ft.	4.6 m
$H_1 + H_2 + H_3$ MAX. =15 ft. (4.6 m)			

Note: Use SLP Series components only.

Note: There MUST be a 25% reduction in total H when using flex vent except when using the simple up and out installation (see Figure 7.3).

Note: This venting configuration is approved ONLY for Natural Gas models.

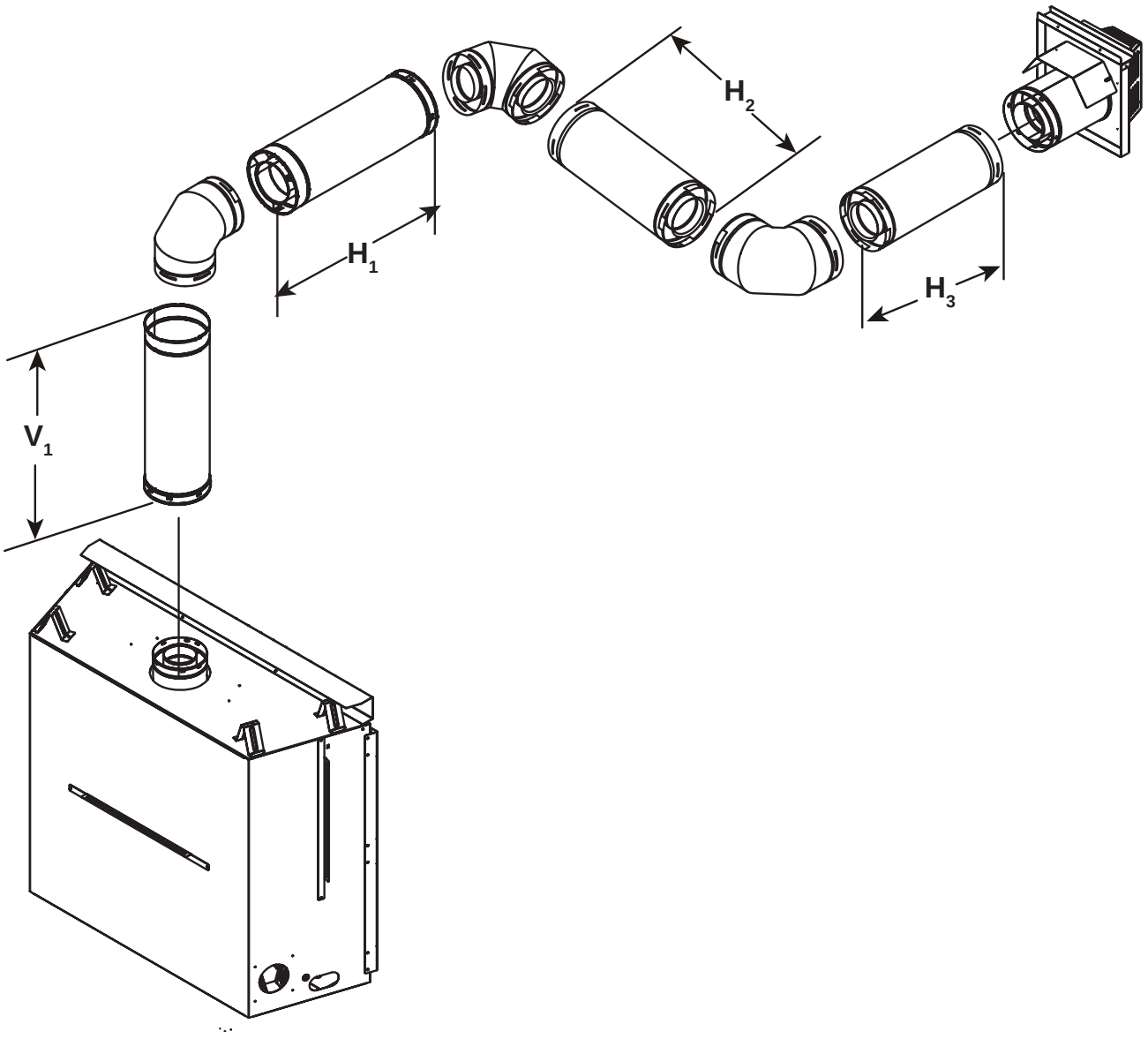


Figure 7.7

Top Vent - Vertical Termination
No Elbows

V_1 = 44 ft. Max. (13.4 m)

Note: If installing a vertical vent/termination off the top of the appliance, the optional exhaust restrictor may be needed.

Note: Use SLP Series components only.

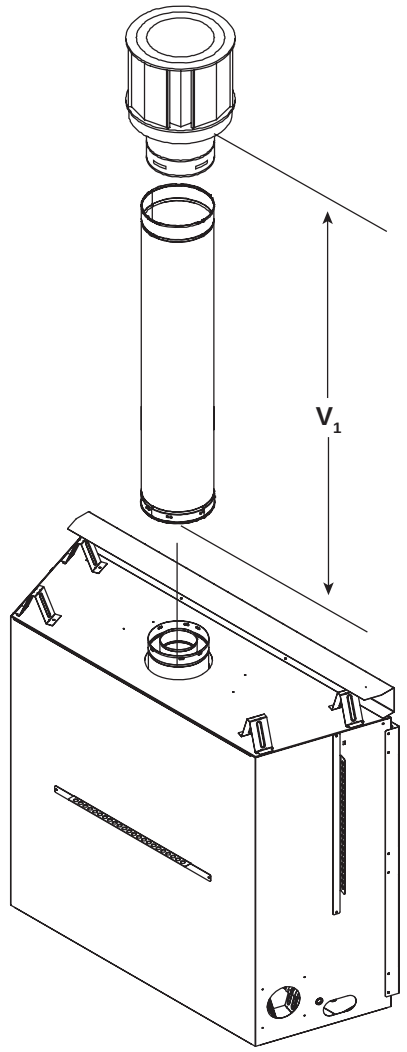


Figure 7.8 Vertical Vent Maximum

Exhaust restrictors are recommended for these vertically terminated products which have excessive draft. Exhaust restrictors will compensate for high draft, and restore visual flame height. If the vent configuration has a total vertical of 15-44 feet, an exhaust restrictor may be needed. The exhaust restrictor can be located in the appliance manual bag.

Exhaust restrictor Instructions

1. Locate the two pilot holes located in the inside firebox heat shield as shown in Figure 7.8.
2. Center the exhaust restrictor such that the thru holes in the vent restrictor align with the pilot holes in the restrictor.
3. Use (2) ½" self-piercing screws to secure vent restrictor to firebox heat shield. See Figure 7.9

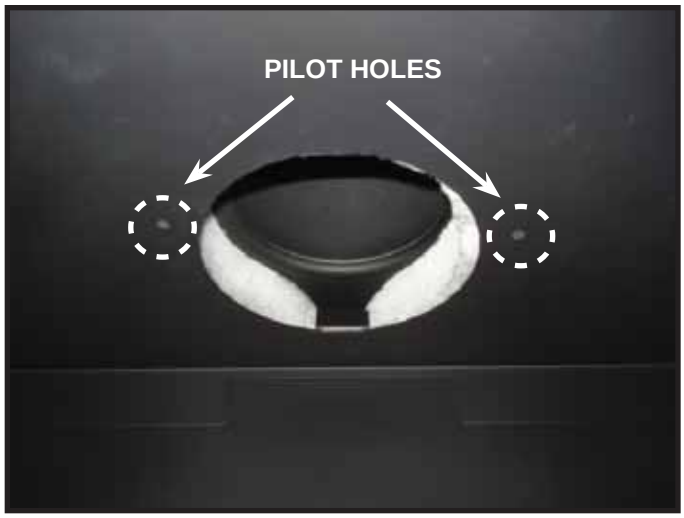


Figure 7.9 Location of Pilot Holes

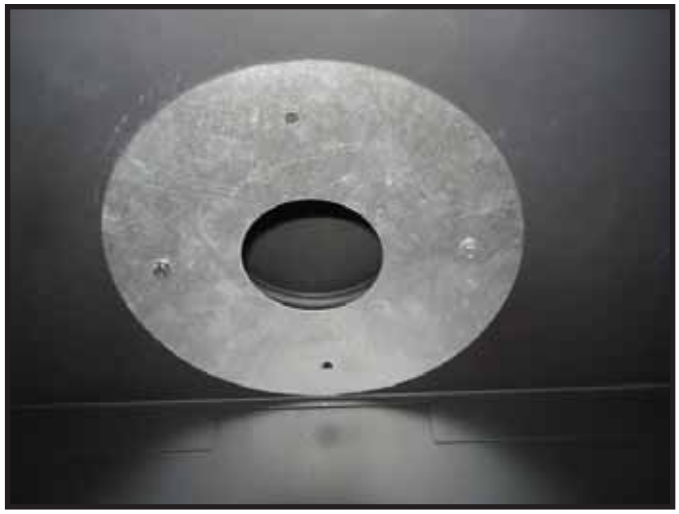


Figure 7.10 Exhaust Restrictor Installation

4. In some applications, such as those where the fireplace is elevated off the floor, the vent restrictor may be painted, but painting is not required.

Notice: *Before painting, contact your dealer for information on the appropriate high temperature paint.*

Top Vent - Vertical Termination
Venting with 2 elbows

SLR					
V_1 Minimum		H Maximum		V_2	$V_1 + V_2$ Minimum
90° Elbow		2 ft.	610 mm	*	*
1 ft,	152 mm	3 ft.	914 mm	*	*
2 ft.	457 mm	5 ft.	1.5 m	*	*
3 ft.	914 mm	7 ft.	2.1 m	*	*
4 ft.	1.1 m	15 ft.	4.6 m	*	*
H MAX. =15 ft. (4.6 m) $V_1 + V_2$ + H MAX. = 40 ft. (12.2 m) * No specific restrictions on this value EXCEPT $V_1 + V_2$ + H cannot exceed 40 ft. (12.2 m)					

Note: Use SLP Series components only.

Note: There MUST be a 25% reduction in total H when using flex vent except when using the simple up and out installation (see Figure 7.3).

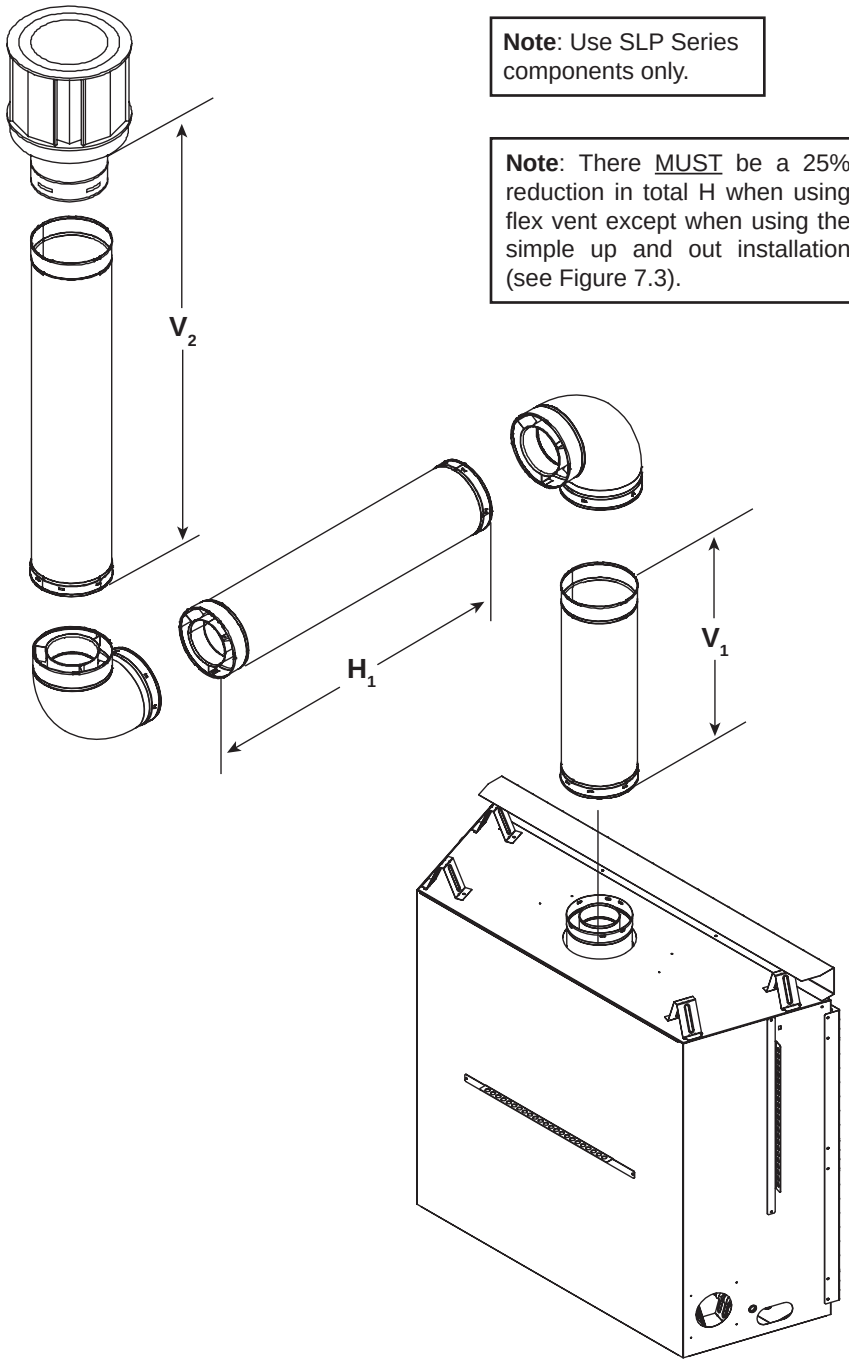
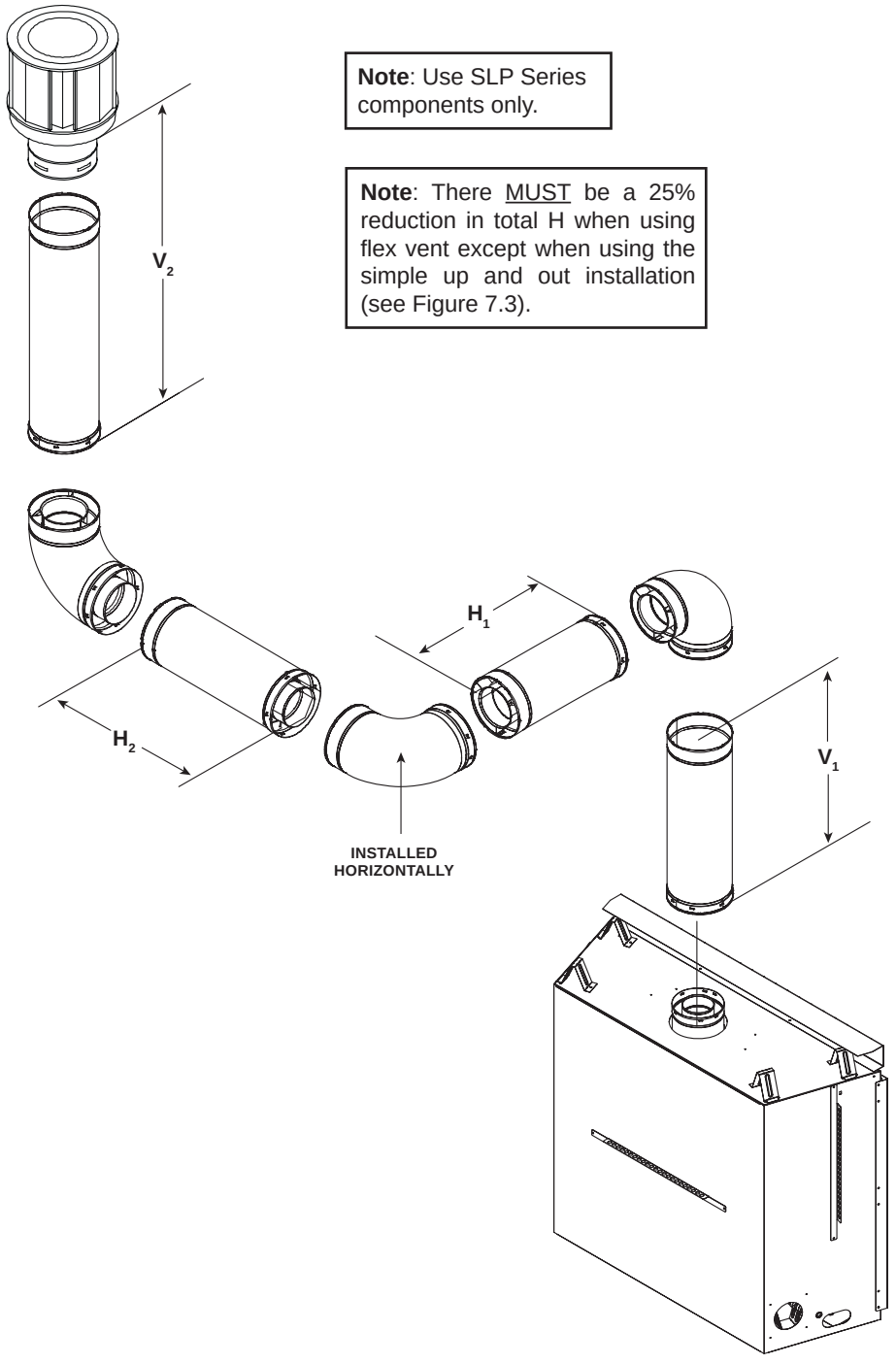


Figure 7.11

Top Vent - Vertical Termination
Venting with 3 elbows

SLR					
V_1 Minimum		$H_1 + H_2$ Maximum		V_2	$V_1 + V_2$ Minimum
90° Elbow		1 ft.	305 mm	*	*
1 ft.	305 mm	2 ft.	610 mm	*	*
2 ft.	610 mm	4 ft.	1.2 m	*	*
3 ft.	914 mm	6 ft.	1.8 m	*	*
4 ft.	1.2 m	14 ft.	4.3 m	*	*
H MAX. =14 ft. (4.3 m) $V_1 + V_2 + H_1 + H_2$ MAX. = 40 ft. (12.2 m) * No specific restrictions on this value EXCEPT $V_1 + V_2 + H_1 + H_2$ cannot exceed 40 ft. (12.2 m)					



Note: Use SLP Series components only.

Note: There MUST be a 25% reduction in total H when using flex vent except when using the simple up and out installation (see Figure 7.3).

Figure 7.12

Top Vent - Vertical Termination
Venting with 4 elbows

Note: Use SLP Series components only.

Note: There MUST be a 25% reduction in total H when using flex vent except when using the simple up and out installation (see Figure 5.3).

V_1 MIN.		H_1 MAX.		V_2 MIN.		H_2 MAX.		V_3 MIN.	
1-1/2 ft.	457 mm	4 ft.	1.2 m	4 ft.	1.2 m	4 ft.	1.2 m	3-1/2 ft.	1.0 m
$V_1 + V_2 + V_{3+} H_1 + H_2$ Maximum= 40 ft. (12.2 m)									

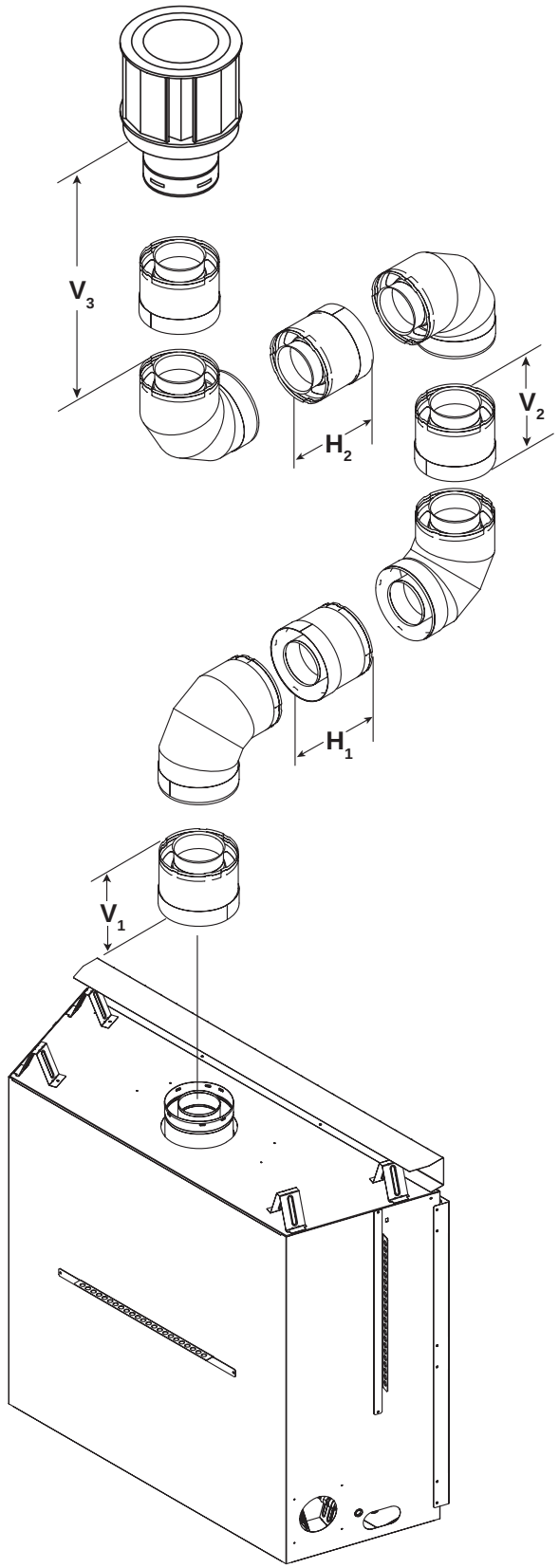


Figure 7.13

8 Vent Clearances and Framing

A. Pipe Clearances to Combustibles

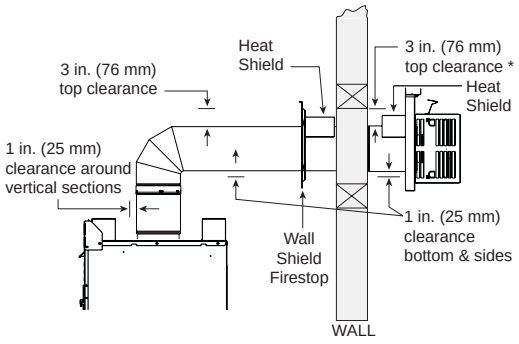
WARNING! Risk of Fire! *Maintain air space clearance to vent.* ***DO NOT*** *pack insulation or other combustibles:*

- *Between ceiling firestops*
- *Between wall shield firestops*
- *Around vent system*

Failure to keep insulation or other material away from vent pipe may cause over heating and fire.

Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm).
- **SLP heat shield** - designed to be used on a wall 4-3/8 in. to 7-5/8 in. (111 mm to 194 mm thick).
- If wall thickness is less than 4-3/8 the existing heat shields must be field trimmed. If wall thickness is greater than 7-5/8 in. a DVP-HSM-B will be required.

(SLP Pipe Shown)


Heat Shield
3 in. (76 mm) top clearance *
3 in. (76 mm) top clearance
Heat Shield
1 in. (25 mm) clearance around vertical sections
1 in. (25 mm) clearance bottom & sides
Wall Shield Firestop
WALL

* When using SLP pipe, minimum clearances from the vent pipe to combustible materials at inside wall firestops are: Top: 2-1/2 in. (64 mm) Bottom: 1/2 in. (13 mm) Sides: 1 in. (25 mm)

Figure 8.1 Horizontal Venting Clearances To Combustible Materials

B. Wall Penetration Framing

Combustible Wall Penetration

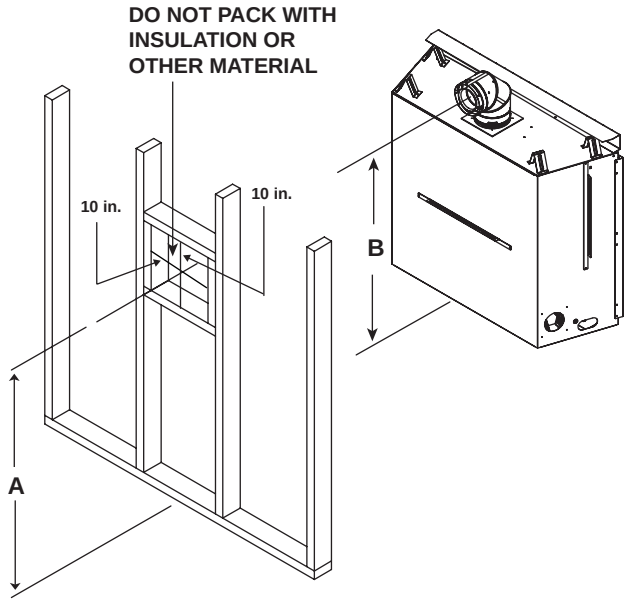
Whenever a combustible wall is penetrated, you must frame a hole for the wall shield firestop(s). The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

- The opening must be framed on all four sides using the same size framing materials as those used in the wall construction.
- SLP pipe - A wall shield firestop must be placed on each side of an interior wall. A minimum 1-1/2 in. (38 mm) overlap of attached heat shields must be maintained.
- See Section 10.L. for information for regarding the installation of a horizontal termination cap.

Non-Combustible Wall Penetration

If the hole being penetrated is surrounded by noncombustible materials such as concrete, a hole with diameter one in. greater than the pipe is acceptable.

Whenever a non-combustible wall is penetrated, the wall shield firestop is only required on one side and no heat shield is necessary.



A*	B
48-1/16 in.	47-1/16 in.

* Shows center of vent framing hole for top venting. The center of the hole is one (1) in. (25.4 mm) above the center of the horizontal vent pipe.

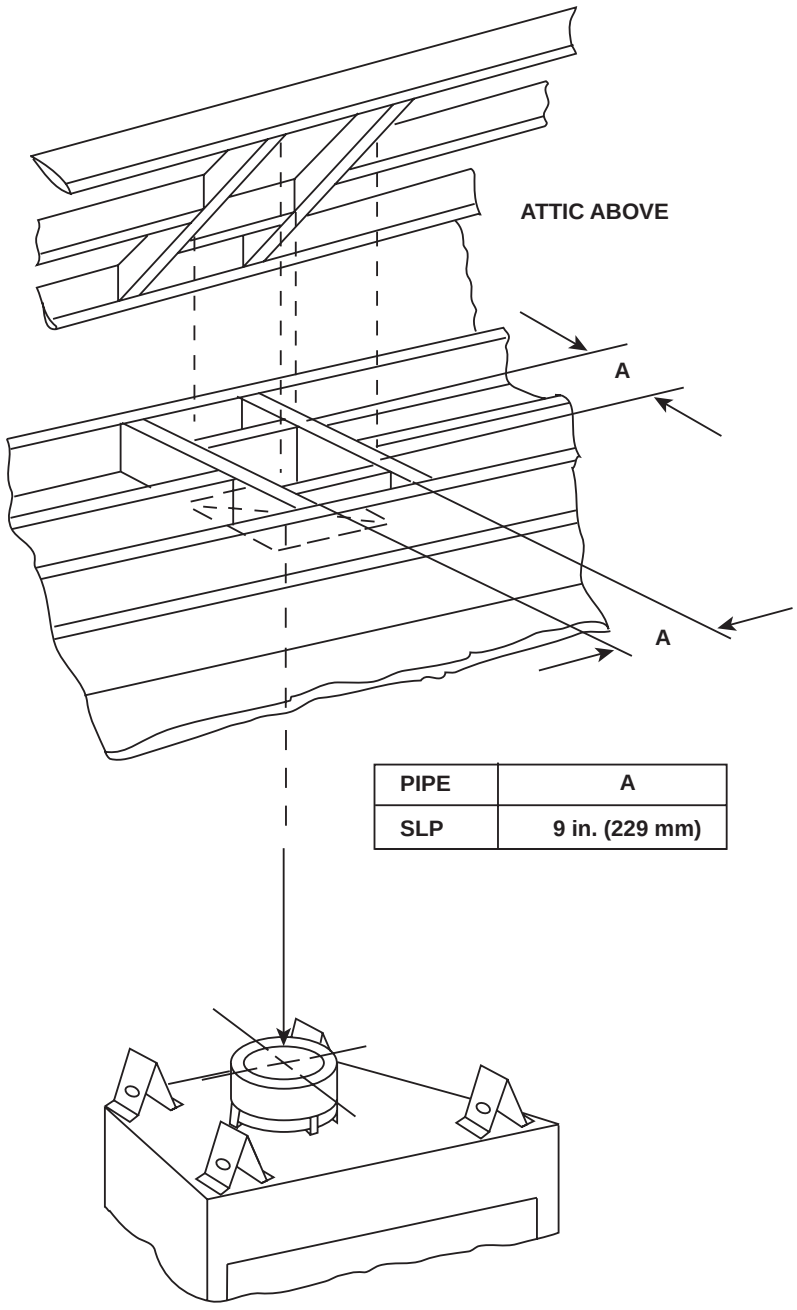
Figure 8.2 Wall Penetration

C. Install the Ceiling Firestop

A ceiling firestop **MUST** be used between floors and attics.

- **SLP pipe only** - Frame opening 9 in. x 9 in. (229 mm x 229 mm) whenever the vent penetrates a ceiling/floor (see Figure 8.4).
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- The ceiling firestop may be installed above or below the ceiling joists when installed with a attic insulation shield. It must be under joists between floors that are not insulated. Refer to Figure 8.5.
- Secure with three fasteners on each side.

WARNING! Risk of Fire! DO NOT pack insulation around the vent. Insulation must be kept back from the pipe to prevent overheating.



PIPE	A
SLP	9 in. (229 mm)

Figure 8.4 Installing Ceiling Firestop

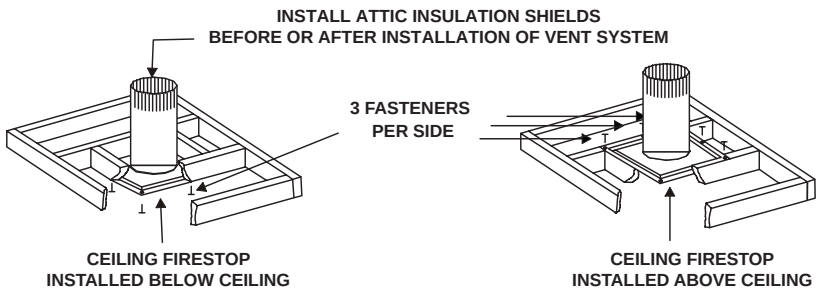


Figure 8.5 Installing the Attic Shield

D. Install Attic Insulation Shield

WARNING! Fire Risk. DO NOT *allow loose materials or insulation to touch vent. Hearth & Home Technologies Inc. requires the use of an attic shield.*

The National Fuel Gas Code ANSI Z223.1 and NFPA 54 requires an attic shield constructed of 26 gauge minimum metal that extends at least 2 in. (51 mm) above insulation.

Attic shields must meet specified clearance and be secured in place.

Flat Ceiling Installation

- Remove one shield from box.

NOTICE: *Cut previously installed batt insulation to make room for the attic insulation shield.*

- Wrap shield around pipe if pipe is already installed in area to be insulated.
- Match the three holes in each side and fasten with three screws to form a tube.
- Bend three tabs on the bottom of the shield outward to allow attachment to the ceiling firestop.
- Bend the remaining bottom tabs inward 90° to maintain the air space between the pipe and the shield. Set the shield on the ceiling firestop and attach to the firestop.
- Bend all tabs inward 90° around the top of the shield. These tabs must be used to prevent blown insulation from getting between the shield and vent pipe, and to maintain air space clearance.

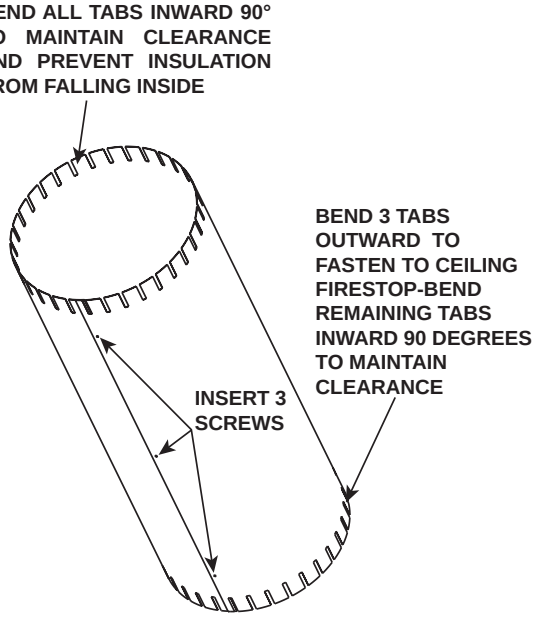

BEND ALL TABS INWARD 90° TO MAINTAIN CLEARANCE AND PREVENT INSULATION FROM FALLING INSIDE
BEND 3 TABS OUTWARD TO FASTEN TO CEILING FIRESTOP-BEND REMAINING TABS INWARD 90 DEGREES TO MAINTAIN CLEARANCE
INSERT 3 SCREWS

Figure 8.6 Attic Insulation Shield

Vaulted Ceiling Installation

- Remove one shield from box.

NOTICE: *Cut previously installed batt insulation to make room for the attic insulation shield.*

- Cut the attic insulation shield (if application is for vaulted ceiling) to fit your ceiling pitch. Snip cut edge to recreate 1 in. bend tabs all the way around the bottom.
- Wrap shield around pipe if pipe is already installed in area to be insulated.
- Match the three holes in each side and fasten with three screws to form a tube.
- Bend three tabs on the bottom of the shield outward to allow attachment to the ceiling firestop.
- Bend the remaining bottom tabs inward 90° to maintain the air space between the pipe and the shield. Set the shield on the ceiling firestop and attach to the firestop.
- Bend all tabs inward 90° around the top of the shield. These tabs must be used to prevent blown insulation from getting between the shield and vent pipe, and to maintain air space clearance.

9 Appliance Preparation

A. Top Vent

CAUTION! Risk of Cuts, Abrasions or Flying Debris. *Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.*

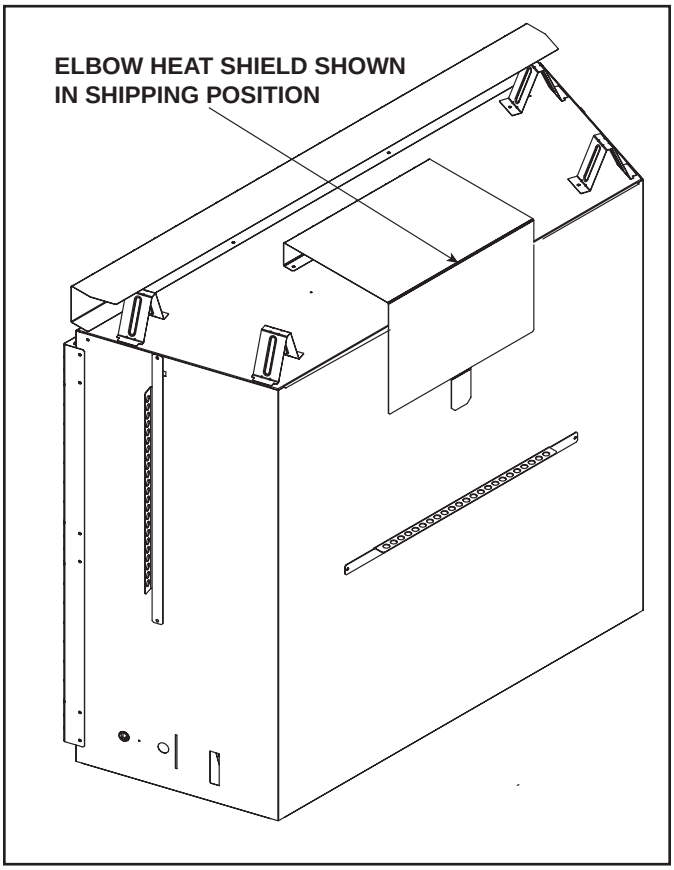


Figure 9.1 Elbow Shield Shown as Shipped

If venting with a 90 degree elbow directly off of the top of the appliance, the elbow heatshield must be repositioned as shown in Figure 9.2.

If venting vertically or using a straight seciton of vertical pipe, remove the elbow heat shield and discard by removing the two 1/4 in. screws that secure the elbow heat shield to the top of the fireplace.

For all venting applications, ensure that the pipe gasket is in place before attaching any pipe section. This gasket is shipped in place around the starting collar. See Figure 9.2.

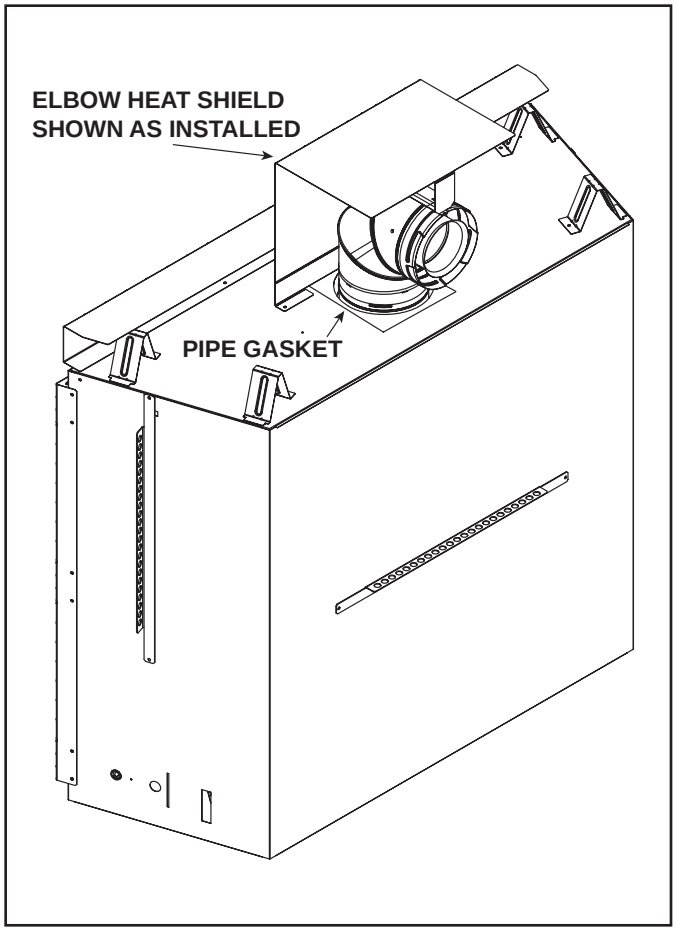


Figure 9.2 Elbow Shield Shown Installed

B. Securing and Leveling the Appliance

WARNING! Risk of Fire! *Prevent contact with:*

- *Sagging or loose insulation*
- *Insulation backing or plastic*
- *Framing and other combustible materials*

Block openings into the chase to prevent entry of blown-in insulation. Make sure insulation and other materials are secured.

DO NOT *notch the framing around the appliance standoffs. Failure to maintain air space clearance may cause overheating and fire.*

For details on setting the appliance in the framing, refer to section 13.A. The diagram shows how to properly position, level, and secure the appliance (see Figure 9.3). Nailing tabs are provided to secure the appliance to the framing members.

- Bend out nailing tabs on each side.
- Place the appliance into position.
- Keep nailing tabs flush with the framing.
- Level the appliance from side to side and front to back.
- Shim the appliance as necessary. It is acceptable to use wood shims underneath the appliance.
- Secure the appliance to the framing by using nails or screws through the nailing tabs.
- Secure the appliance to the floor by inserting two screws through the pilot holes at the bottom of the appliance.

Figure 9.3 shows the fireplace installed on the floor. However, this fireplace can be elevated off the floor provided that the fireplace is properly supported by framing materials and the ceiling clearances are maintained.

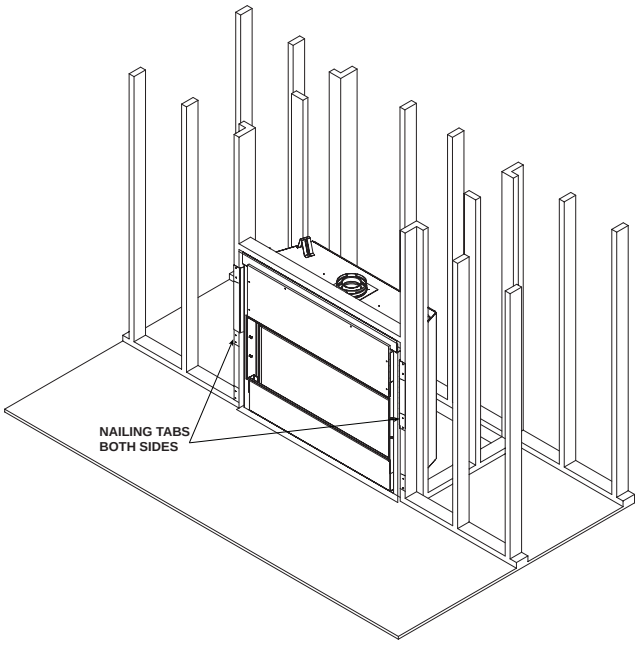


Figure 9.3 Proper Positioning, Leveling And Securing Of An Appliance

10 Installing Vent Pipe (SLP Pipe)

A. Assemble Vent Sections

To attach the first vent component to the starting collars of the appliance:

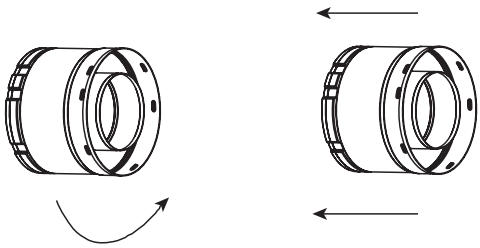
- Lock the vent components into place by sliding the pipe section onto the collar.
- Align the seam of the pipe and seam of collar to allow engagement. Rotate the vent component to lock into place. Use this procedure for all vent components. See Figure 10.1.
- Slide the gasket over the first vent section and place it flush to the appliance. This will prevent cold air infiltration. High temperature caulk may be used to hold the part in place.
- Continue adding vent components, locking each succeeding component into place.
- Ensure that each succeeding vent component is securely fitted and locked into the preceding component.

Commercial, Multi-family (Multi-level exceeding two stories), or High-Rise Applications

For Installation into a commercial, multi-family (multi-level exceeding two stories) or high-rise applications: All outer pipe joints must be sealed with high temperature silicone, including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections. See Figure 10.2
- Only outer pipes need to be sealed. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

WARNING! Risk of Fire or Explosion! *DO NOT break silicone seals on slip sections. Use care when removing termination cap from slip pipe. If slip section seals are broken during removal of the termination cap, vent may leak.*



Note: Align seams to engage pipe, then rotate counterclockwise to lock

Figure 10.1 Adding Venting Components

Figure 10.2 High Temperature Silicone Sealant

B. Assemble Slip Sections

- Slide the inner flue of the slip section into the inner flue of the pipe section and the outer flue of the slip section over the outer flue of the pipe section. See Figure 10.3.
- Slide together to the desired length.

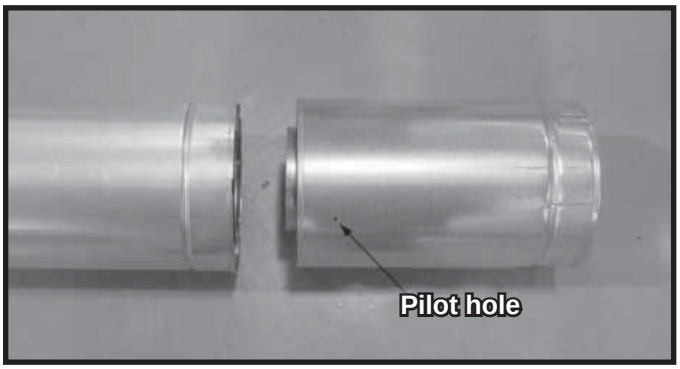


Figure 10.3 Slip Section Pilot Holes

- Maintain a 1-1/2 in. (38 mm) overlap between the slip section and the pipe section.
- Secure the pipe and slip section with two screws no longer than 1/2 in. (13 mm), using the pilot holes in the slip section. See Figure 10.4.

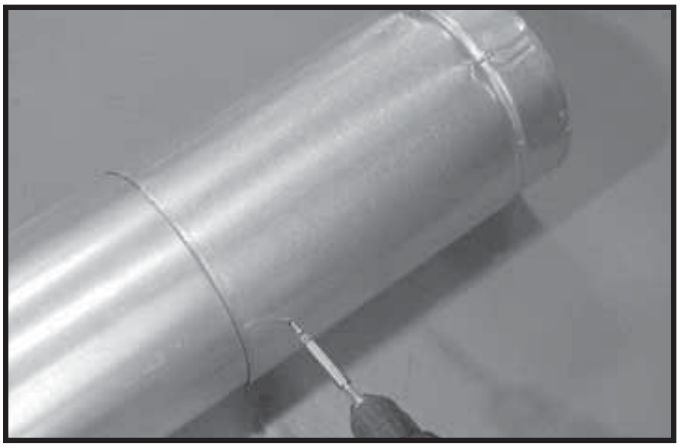


Figure 10.4 Screws into Slip Section

- Continue adding pipe as necessary following instructions in “Assembling Pipe Sections.”

NOTICE: *If slip section is too long, the inner and outer flues of the slip section can be cut to the desired length.*

NOTICE: *When installing a vent system with an HRC termination cap, all pipe system joints shall be sealed using a high temperature silicone sealant.*

- *Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections.*
- *Only outer pipes are sealed, sealing the inner flue is not required.*
- *All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed.*

C. Secure The Vent Sections

- Vertical runs of pipe must be supported every 8 ft. (2.44 m).
- Horizontal sections must be supported every 5 feet (1.52 m).
- Vent supports or plumbers strap (spaced 120º apart) may be used to support. See figures 10.5 and 10.6.
- Wall shield firestops may be used to provide horizontal support.
- Ceiling firestops have tabs that may be used to provide vertical support.

WARNING! Risk of Fire, Explosion or Asphyxiation! *Improper support may allow vent to sag and separate. Use vent run supports and connect vent sections per installation instructions.* ***DO NOT*** *allow vent to sag below connection point to appliance.*

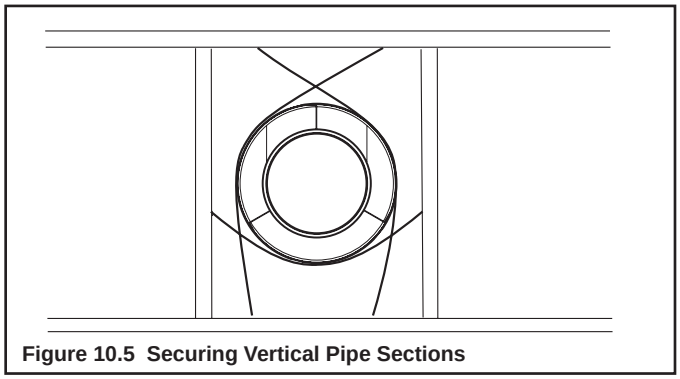


Figure 10.5 Securing Vertical Pipe Sections

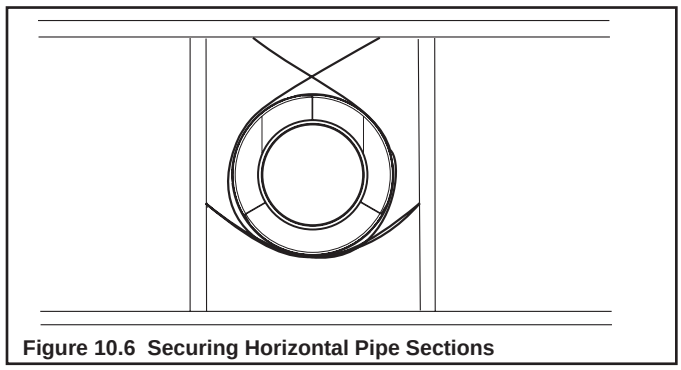


Figure 10.6 Securing Horizontal Pipe Sections

D. Disassemble Vent Sections

- Rotate either section (see Figure 8.7) so the seams on both pipe sections are aligned as shown in Figure 10.8.
- Pull carefully to separate the pieces of pipe.

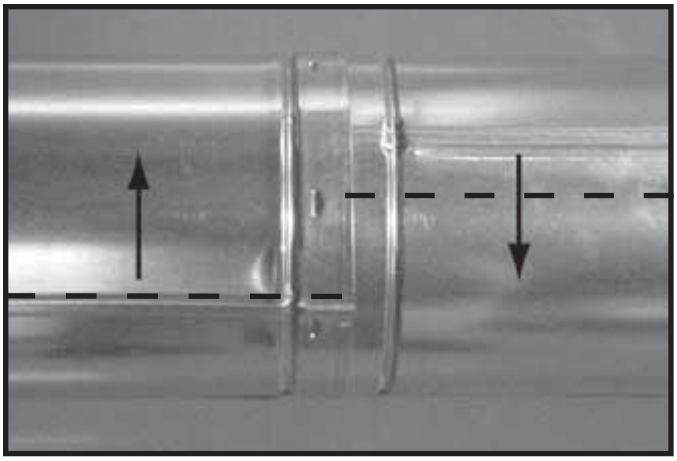


Figure 10.7 Rotate Seams for Disassembly

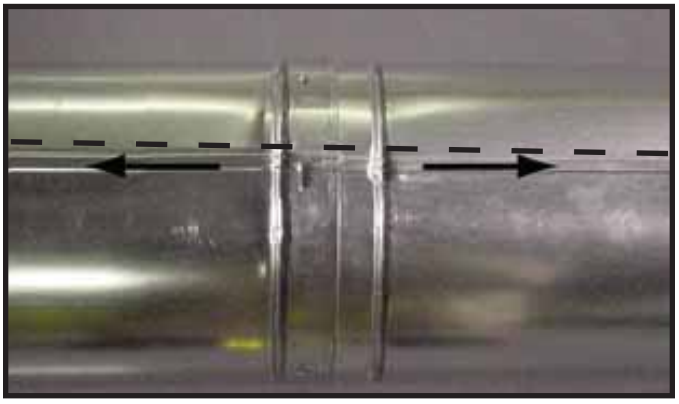


Figure 10.8 Align and Disassemble Vent Sections

E. Install Decorative Ceiling Components

A decorative ceiling thimble can be installed on a flat ceiling through which the vent passes. The decorative ceiling thimble is used to cover the firestop.

- Seal the gap between the vent pipe and firestop using high temperature silicone to prevent cold air infiltration.
- Install the decorative ceiling thimble by sliding it up to the ceiling and attaching it using the provided screws.

A decorative cathedral ceiling support box can be installed on a cathedral ceiling through which the vent passes.

- Use a plumb-bob to mark the center line of the venting system on the ceiling and drill a small hole through the ceiling and roof at this point. Locate the hole and mark the outline of the cathedral ceiling support box on the outside roof.
- Remove shingles or other roof covering as necessary to cut the rectangular hole for the support box. Cut the hole 1/8 in. (3 mm) larger than the support box outline.
- Lower the support box through the hole in the roof until its bottom is at least 2 in. (51 mm) below the ceiling (Figure 10.9).
- Level the support box both vertically and horizontally and temporarily tack it in place through the inside walls into the roof sheathing.
- Use tin snips to cut the support box from the top corners down to the roof line and fold the resulting flaps to the roof. See Figure 10.10.
- Nail the flaps to the roof AFTER running a bead of non hardening sealant between the flaps and the roof.

WARNING! Risk of Fire! *Clean out ALL materials from inside the support box and complete the vertical vent run and termination.*

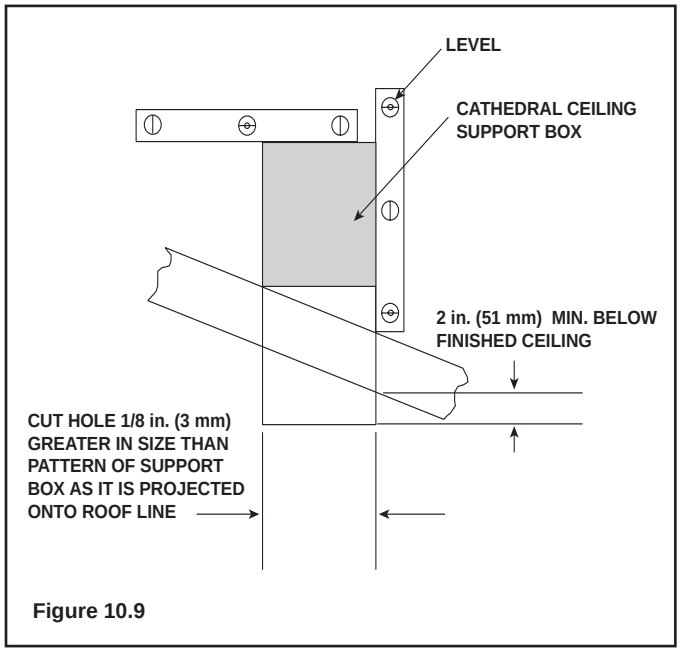

LEVEL
CATHEDRAL CEILING SUPPORT BOX
2 in. (51 mm) MIN. BELOW FINISHED CEILING
CUT HOLE 1/8 in. (3 mm) GREATER IN SIZE THAN PATTERN OF SUPPORT BOX AS IT IS PROJECTED ONTO ROOF LINE

Figure 10.9

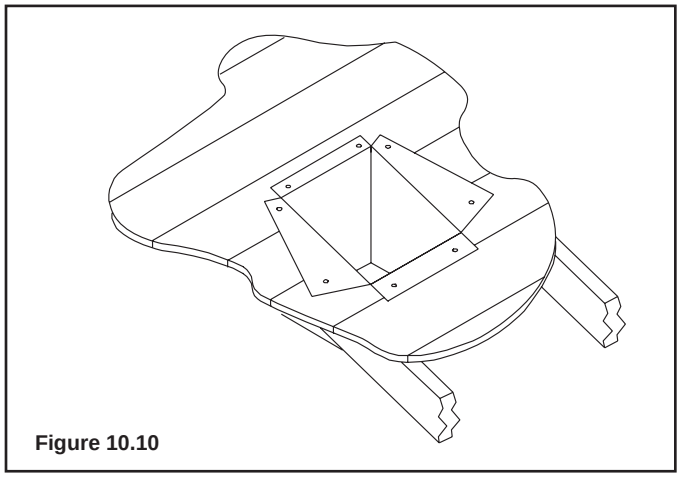
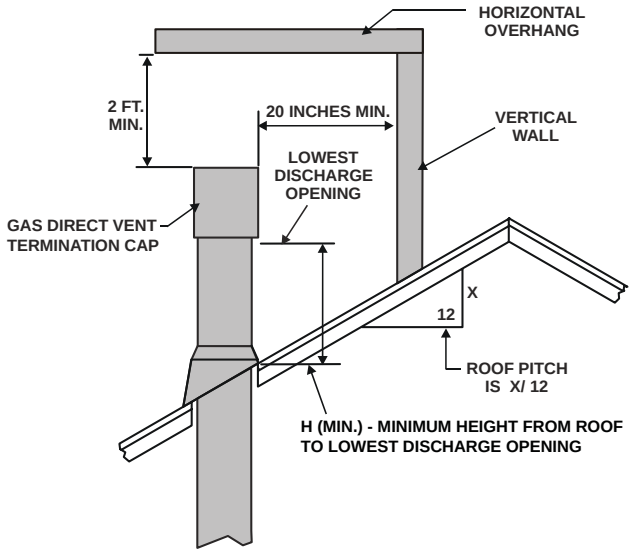


Figure 10.10

F. Install Metal Roof Flashing

Note: Skip this section if using the RF4-8.

- See minimum vent heights for various pitched roofs (Figure 10.11) to determine the length of pipe to extend through the roof.
- Slide the roof flashing over the pipe sections extending through the roof as shown in Figure 10.12.



Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0*
Over 6/12 to 7/12	1.25*
Over 7/12 to 8/12	1.5*
Over 8/12 to 9/12	2.0*
Over 9/12 to 10/12	2.5
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0
Over 12/12 to 14/12	5.0
Over 14/12 to 16/12	6.0
Over 16/12 to 18/12	7.0
Over 18/12 to 20/12	7.5
Over 20/12 to 21/12	8.0

* 3 foot minimum in snow regions

Figure 10.11 Minimum Height From Roof To Lowest Discharge Opening

NOTICE: *Failure to properly caulk the roof flashing could cause water entry.*

- Caulk the gap between the roof flashing and the outside diameter of the pipe.
- Caulk the perimeter of the flashing where it contacts the roof surface. See Figure 10.12.

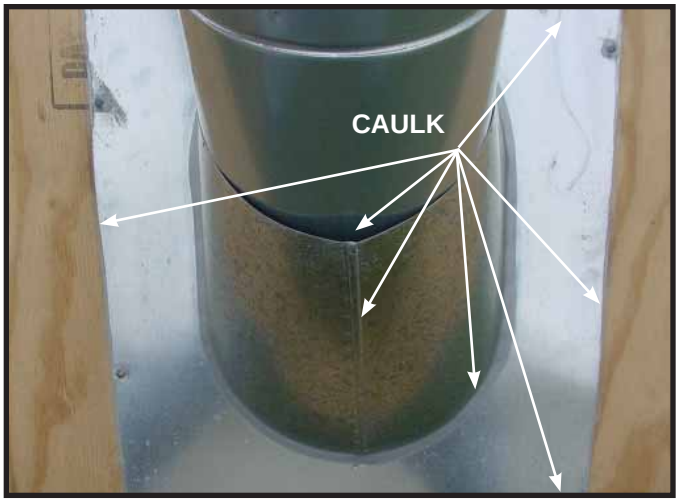


Figure 10.12

G. Assemble and Install Storm Collar

CAUTION! Risk of Cuts, Abrasions or Flying Debris. Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

- Connect both halves of the storm collar with two screws (see Figure 10.13).
- Wrap the storm collar around the exposed pipe section closest to the roof and align brackets. Insert a bolt (provided) through the brackets and tighten the nut to complete the storm collar assembly. Make sure the collar is tight against the pipe section.
- Slide the assembled storm collar down the pipe section until it rests on the roof flashing (see Figure 10.14).
- Caulk around the top of the storm collar (see Figure 10.20).

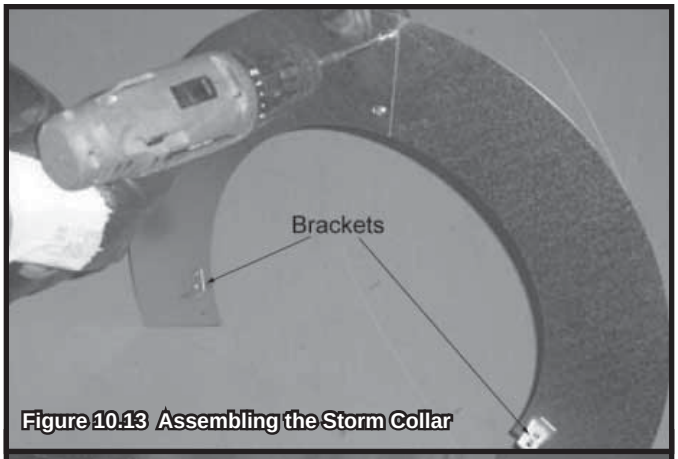


Figure 10.13 Assembling the Storm Collar

Figure 10.14 Assembling the Storm Collar Around the Pipe

H. Install RF4-8

The RF4-8 may be used in place of the roof flashing and storm collar (Sections 10.F and Section 10.G.)

Pipe must be supported within 12 inches of the roofline using plumbers strapping or an SLP-FS when using the RF4-8 Flashing. Refer to Sect. 10.C Securing Vent Sections.

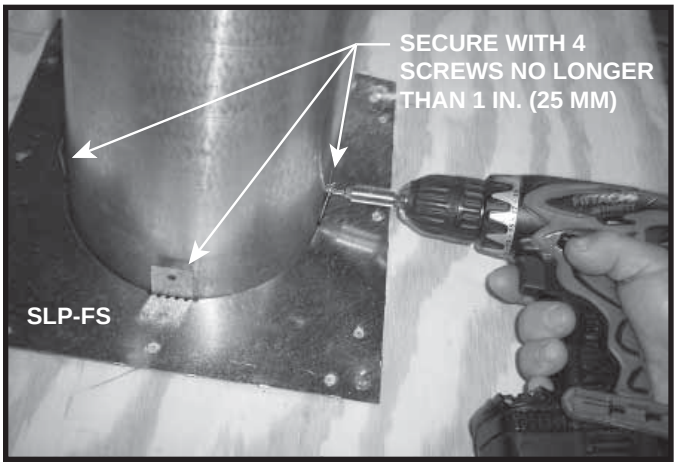


Figure 10.15 Secure Pipe with SLP-FS

- Trim the rubber boot (using scissors or a utility knife), cutting along the marked measurement lines. See Figure 10.16. Use the 150 mm line.
- Lubricate pipe or flue with water and slide the flashing down. It may be necessary to trim the top shingles around the base of the rubber boot to ensure a good fit.
- Draw around flashing, remove.
- Apply silicone sealant to roof inside the lines (Figure 10.17)
- Lubricate pipe or flue with water and slide flashing down. Seat firmly in sealant. Nail roof flashing to the roof.
- Apply silicone sealant on the top outside of the base plate on the sides and on top edge. See Figure 10.18. Install shingles, Apply sealant at the top edge of the rubber boot. See Figure 10.19.
- We recommend that you top coat with conventional acrylic house paint to improve the appearance of your galvanized base flashing.

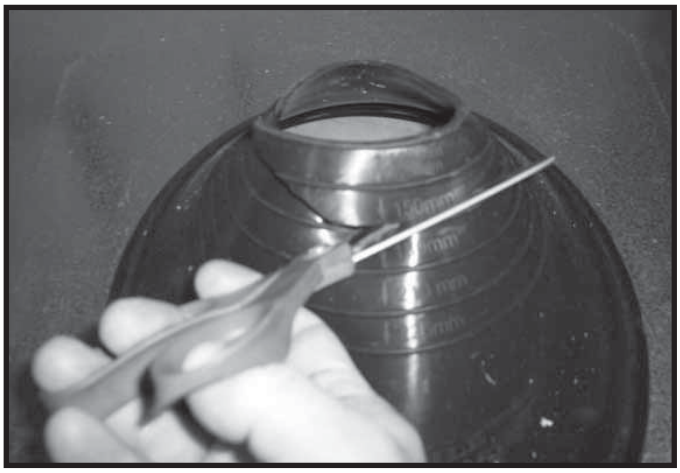


Figure 10.16 Trim Rubber Boot

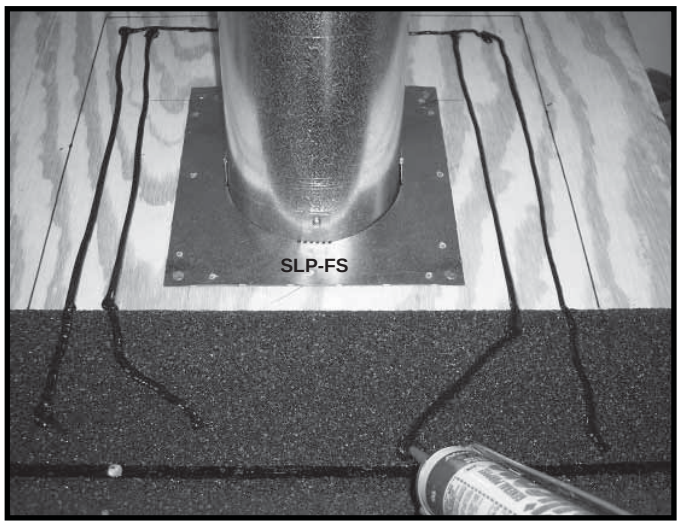


Figure 10.17 Apply Sealant

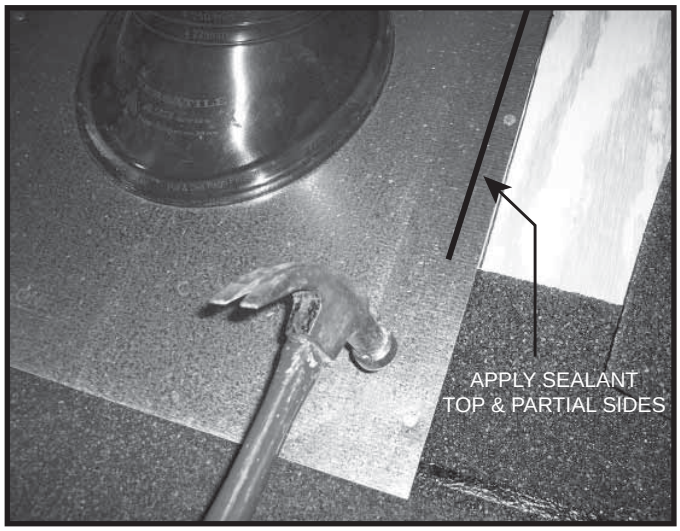


Figure 10.18 Slide Flashing Down, Secure & Apply Sealant

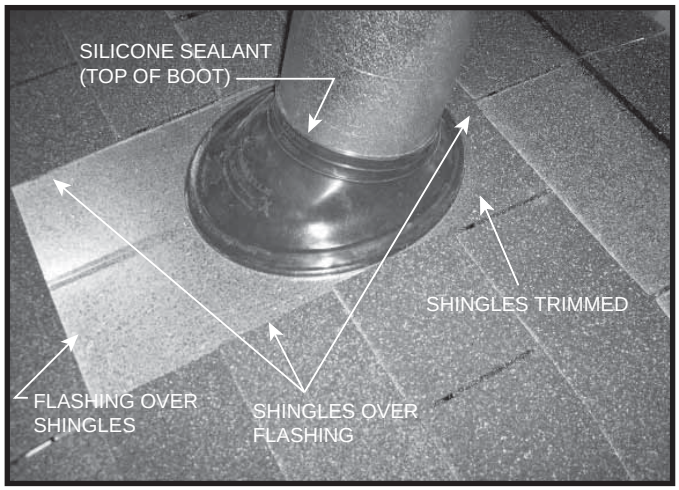


Figure 10.19 Installation Complete

I. Install Vertical Termination Cap

- Attach the vertical termination cap by sliding the inner collar of the cap into the inner flue of the pipe section while placing the outer collar of the cap over the outer flue of the pipe section.
- Secure the cap by driving three self-tapping screws (supplied) through the pilot holes in the outer collar of the cap into the outer flue of the pipe (see Figure 10.20).

Figure 10.20

J. Install Decorative Wall Components

A decorative wall thimble can be installed on wall through which the vent passes. The decorative wall thimble is used to cover the firestop.

- Slide the decorative wall thimble over the last section of horizontal pipe before connecting the termination cap to the pipe.
- Once the pipe section and the termination cap have been connected, slide the wall thimble up to the interior wall surface and attach with screws provided. See Figure 10.21.

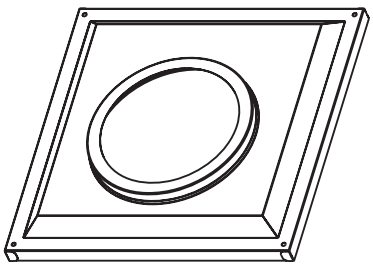


Figure 10.21 Wall Thimble

K. Heat Shield Requirements for Horizontal Termination

WARNING! Risk of Fire! *To prevent overheating and fire, heat shields must extend through the entire wall thickness.*

- ***DO NOT*** *remove the heat shields attached to the wall shield firestop and the horizontal termination cap (shown in Figure 10.22).*
- *Heat shields must overlap 1-1/2 in. (38 mm) minimum.*

There are two sections of the heat shield. One section is factory-attached to the wall shield firestop. The other section is factory-attached to the cap. See Figure 10.22.

If the wall thickness does not allow the required 1-1/2 in. (38 mm) heat shield overlap when installed, an extended heat shield must be used.

- If the wall thickness is less than 4 in./102 mm (DVP) or 4-3/8 in./ 111 mm (SLP), the heat shields on the cap and wall shield firestop must to be trimmed. A minimum 1-1/2 in. (38 mm) overlap MUST be maintained.
- Use an extended heat shield if the finished wall thickness is greater than 7-1/4 in. (184 mm).
- The extended heat shield may need to be cut to length maintaining sufficient length for a 1-1/2 in. (38 mm) overlap between heat shields.
- Attach the extended heat shield to either of the existing heat shields using the screws supplied with the extended heat shield. Refer to vent components diagrams in the back of this manual.
- Rest the small leg on the extended heat shield on top of the pipe section to properly space it from the pipe section.

Important Notice: Heat shields may <u>not</u> be field constructed.

L. Install Horizontal Termination Cap

WARNING! Risk of Fire! *The telescoping flue section of the termination cap MUST be used when connecting vent.*

- *1-1/2 (38 mm) minimum overlap of flue telescoping section is required.*

Failure to maintain overlap may cause overheating and fire.

- Vent termination must not be recessed in the wall. Siding may be brought to the edge of the cap base.
- Flash and seal as appropriate for siding material at outside edges of cap.
- When installing a horizontal termination cap, follow the cap location guidelines as prescribed by current **ANSI Z223.1** and **CAN/CGA-B149** installation codes and refer to Section 6 of this manual.

CAUTION! Risk of Burns! *Local codes may require installation of a cap shield to prevent anything or anyone from touching the hot cap.*

NOTICE: *For certain exposures which require superior resistance to wind-driven rain penetration, a flashing kit and HRC caps are available. When penetrating a brick wall, a brick extension kit is available for framing the brick.*

Note: When using termination caps with factory-supplied heat shield attached, no additional wall shield firestop is required on the exterior side of a combustible wall.

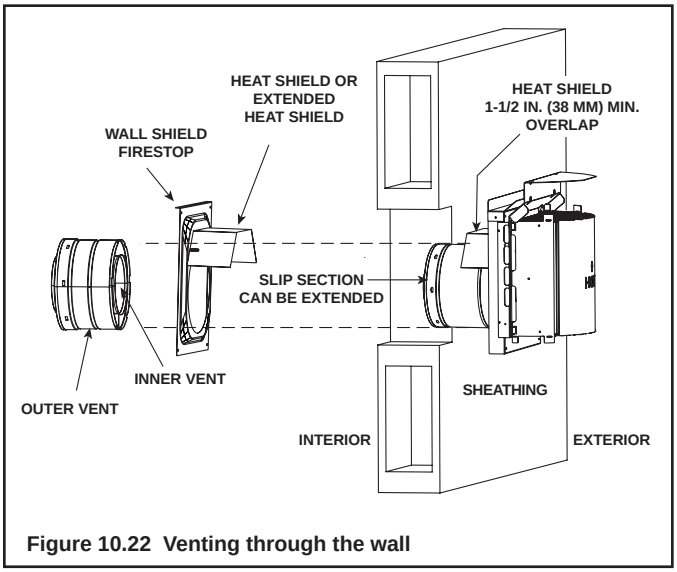


Figure 10.22 Venting through the wall

11 Gas Information

A. Fuel Conversion

- Make sure the appliance is compatible with available gas types.
- Conversions must be made by a qualified service technician using Hearth & Home Technologies specified and approved parts.

B. Gas Pressure

- Optimum appliance performance requires proper input pressures.
- Gas line sizing requirements will be determined in ANSI Z223.1 National Fuel Gas Code in the USA and CAN/CGA B149 in Canada.
- Pressure requirements are:

Gas Pressure	Natural Gas	Propane
Minimum inlet pressure	5.0 in. w.c.	11.0 in. w.c.
Maximum inlet pressure	14.0 in. w.c.	14.0 in. w.c.
Manifold pressure	3.5 in. w.c.	10.0 in. w.c.

WARNING! Risk of Fire or Explosion! *High pressure will damage valve. Low pressure may cause explosion.*

- Verify inlet pressures. Verify minimum pressures when other household gas appliances are operating.
- Install regulator upstream of valve if line pressure is greater than 1/2 psig.

⚠ WARNING

Fire Risk.

Explosion Hazard.

High pressure will damage valve.

- Disconnect gas supply piping BEFORE pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve BEFORE pressure testing gas line at test pressures equal to or less than 1/2 psig.

Note: This appliance does include a manual gas shutoff valve that is located in the valve compartment. This manual gas shutoff valve is accessible for service by removing the basepan and burner assembly. See Figure 11.1.

The lower access cover panel is removable if finishing material is not installed.

There is an access plate located on the left side of the firebox bottom. See Figure 11.2. Remove screws and plate to access the manual shutoff valve included with this fireplace. See Figure 11.3 and Figure 11.4. Depending upon local code, an additional manual gas shutoff, in an easily accessible area may be required and located upstream from the appliance.

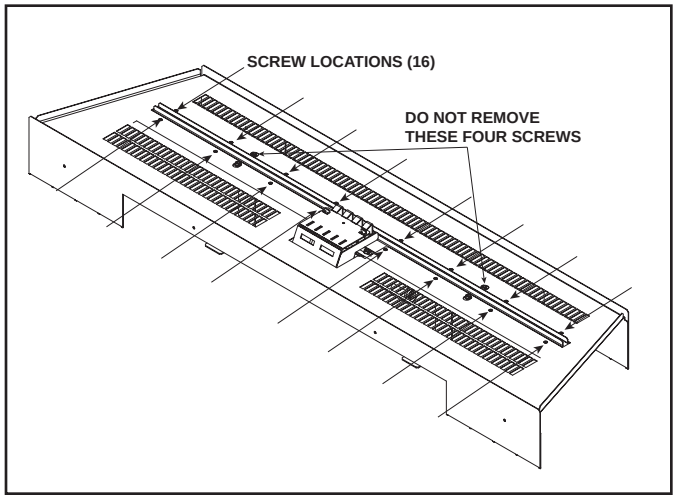


Figure 11.1 Basepan Removal

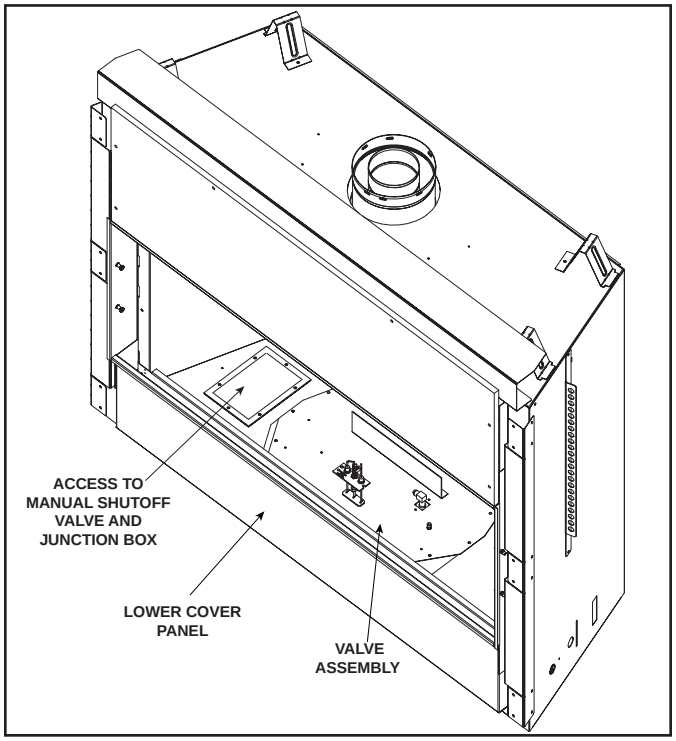


Figure 11.2 Gas and Electrical Access

Note: Have the gas supply line installed in accordance with local codes, if any. If not, follow ANSI 223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter).

Note: A listed (and Commonwealth of Massachusetts approved) 1/2 in. (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 in. (13 mm) control valve inlet.

- **If substituting for these components, please consult local codes for compliance.**

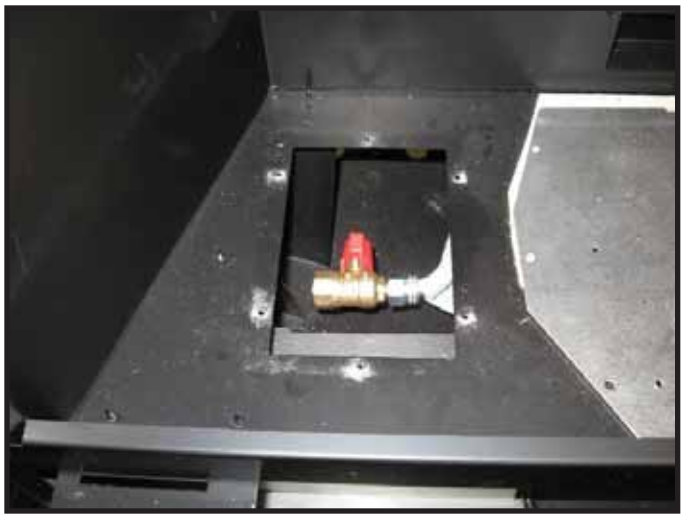


Figure 11.3 Gas Fitting Access

Figure 11.4 Gas Fitting and Junction Box Access

C. Gas Connection

- Refer to Reference Section 16 for location of gas line access in appliance.
- Gas line may be run through knockout(s) provided.
- The gap between supply piping and gas access hole may be caulked with high temperature caulk or stuffed with non-combustible, unfaced insulation to prevent cold air infiltration.
- Ensure that gas line does not come in contact with outer wrap of the appliance. Follow local codes.
- Pipe incoming gas line into valve compartment.
- Connect incoming gas line to the 1/2 in. (13 mm) connection on manual shutoff valve.

WARNING! Risk of Fire or Explosion! *Support control when attaching pipe to prevent bending gas line.*

- A small amount of air will be in the gas supply lines.

WARNING! Risk of Fire or Explosion! *Gas build-up during line purge could ignite.*

- *Purge should be performed by* qualified service technician*.*
- *Ensure adequate ventilation.*
- *Ensure there are no ignition sources such as sparks or open flames.*

Light the appliance. It will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.

WARNING! Risk of Fire, Explosion or Asphyxiation! *Check all fittings and connections with a non-corrosive commercially available leak-check solution.* ***DO NOT*** *use open flame. Fittings and connections could have loosened during shipping and handling.*

WARNING! Risk of Fire! DO NOT *change valve settings. This valve has been preset at the factory.*

D. High Altitude Installations

NOTICE: *If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.*

When installing above 2000 feet elevation:

- In the USA: Reduce burner orifice 4% for each 1000 feet above 2000 feet.
- In CANADA: Reduce burner orifice 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

12 Electrical Information

A. Wiring Requirements

NOTICE: *This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with* **National Electric Code ANSI/NFPA 70-latest edition** *or the* **Canadian Electric Code CSA C22.1.**

- Wire the appliance junction box to 110-120 VAC. This is required for use of optional accessories (standing pilot ignition) or proper operation of the appliance (Intellifire ignition).
- A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.
- Low voltage and 110 VAC voltage cannot be shared within the same wall box.

WARNING! Risk of Shock or Explosion! DO NOT *wire 110V to the valve or to the appliance wall switch. Incorrect wiring will damage controls.*

B. Intellifire Ignition System Wiring

- Wire the appliance junction box to 110 VAC for proper operation of the appliance.

WARNING! Risk of Shock or Explosion! DO NOT *wire IPI controlled appliance junction box to a switched circuit. Incorrect wiring will override IPI safety lockout.*

- Refer to Figure 12.2, Intellifire Pilot Ignition (IPI) Wiring Diagram.
- This appliance is equipped with an Intellifire control valve which operates on a 3 volt system.
- Plug the 3-volt AC transformer into the appliance junction box to supply power to the unit OR install two D cell batteries (not included) into the battery pack before use.

NOTICE: *Batteries should not be placed in the battery pack while using the transformer. Remove batteries before using the transformer, and unplug the transformer before installing the batteries. Battery polarity must be correct or module damage will occur.*

C. Optional Accessories Requirements

- This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

Optional Remote Control Receiver and Battery Pack Location

Batteries are to be installed only when battery power is required. Because of the limited accessibility to valve cavity, the position of the Battery Tray, IPI Control Module, and Optional Remote Control Receiver locations must be installed as shown in Figure 12.1.

The Battery Tray, Control Module, and Remote Control receiver can be accessed thru the air space between the firebox front and the lower-front finishing cover panel. The decorative front and glass assembly must be removed to access these components.

The battery tray is attached with velcro to the inside of the lower cover panel. The IPI control module and the remote control receiver are placed on the firebox bottom.

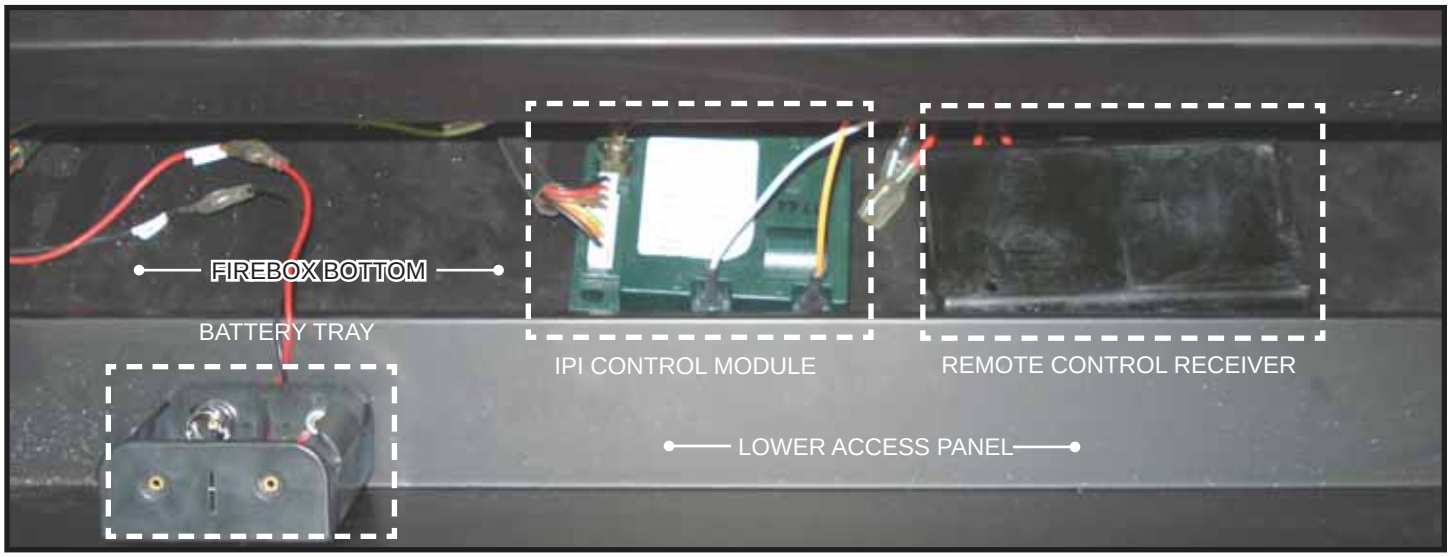
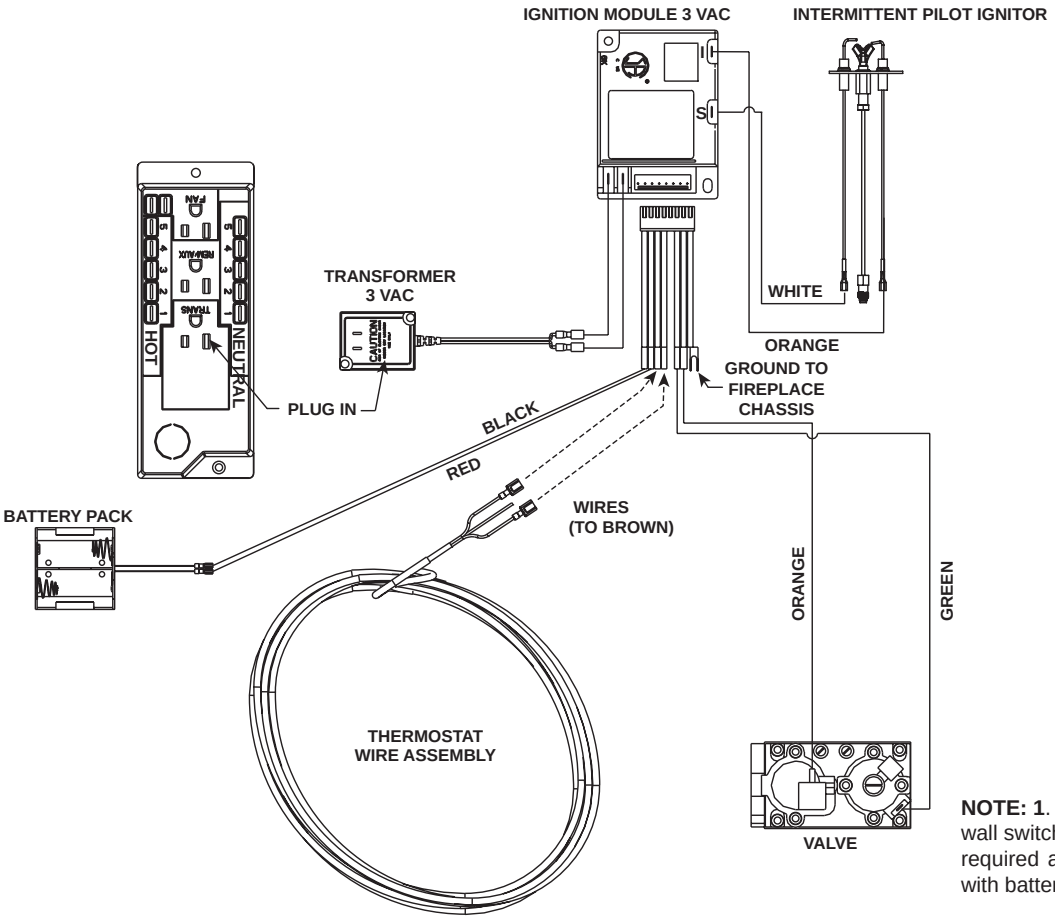


Figure 12.1 Valve Cavity



NOTE: 1. Ignition module, valve, pilot, and wall switch operate on 3 volts. 120 VAC is required at junction box unless equipped with battery back-up.

Figure 12.2 Intellifire Pilot Ignition (IPI) Wiring Diagram with Wall Switch or Thermostat

D. Electrical Service and Repair

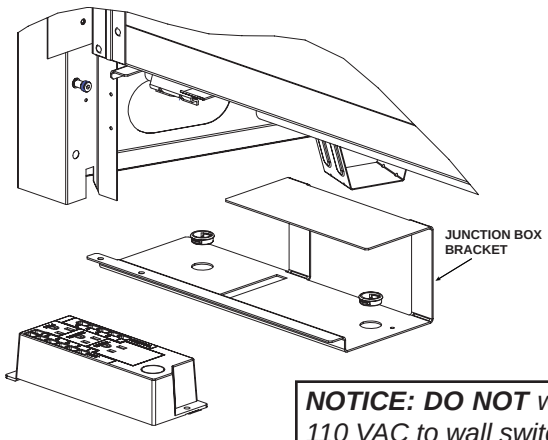
WARNING! Risk of Shock! *Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.*

WARNING! Risk of Shock! *Replace damaged wire with type 105° C rated wire. Wire must have high temperature insulation.*

E. Junction Box Installation

1. Remove the two screws that hold the junction box bracket to the right corner of the fireplace.
2. Remove the one screw that secures the junction box to the junction box bracket.
3. Route the wire through the strain relief in the outer wrap and down through the strain relief on left side of the junction box bracket and up through the right strain relief. See Figure 12.3.
4. Make the connection inside the junction box to the 120V wire. Connect green to the ground nut, black to black and white to white.
5. Reattach junction box to junction box bracket with one screw.
6. Reattach the junction box bracket to the appliance with two screws.

NOTE: There is an alternative access to the junction box. This can be accessed by removing the valve assembly. See Figure 11.2.



***NOTICE: DO NOT** wire 110 VAC to wall switch.*

Figure 12.3 Junction Box Detail

In the event that the junction box needs to be accessed or installed after finish methods have been applied, access is possible by removing the valve assembly. See Fig. 11.2. Bend the top heat shield back and remove the one screw that secures the junction box to the bracket. Ensure the heat shield is bent back so that it is positioned above the junction box.

13 Finishing

A. Framing and Finishing Instructions

WARNING! Risk of Fire! *Comply with all minimum clearances to combustibles as specified. Framing closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.) Failure to comply could cause fire.*

Finishing Instructions

It is important to follow the framing and finishing instructions to ensure proper placement of fireplace into the surrounding framing/finishing materials.

Wall sheathing materials 1/2 in. thick are specified in this installation manual to properly align with the factory-installed non combustible material

WARNING! Risk of Fire! DO NOT*, under any circumstances, remove the factory-installed non-combustible board or cover it with any combustible material, such as:*

- Drywall (gypsum board)
- Plywood
- Or other materials that do not meet the ASTM E 136 Non-combustibility standard. See specification below

Failure to comply with these instructions may cause a fire or cause the appliance to overheat.

Non-Combustible Materials Specification

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

Materials that are reported as passing **ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 ºC** and **UL763** shall be considered non-combustible materials.

Setting the Fireplace into the Framing

Unlike many traditional, single-sided Heat & Glo fireplaces, this fireplace is recessed into surround framing. The left and right nailing tabs were designed for the SLR model as a means to ensure the fireplace is recessed to the correct location within the framing materials.

1. Bend three nailing tabs away from fireplace 180 degrees on both left and right nailing tabs. Do not adjust the column standoffs. See Figure 13.1 and Figure 13.2.
2. Screw each nailing tab to the adjoining framing material. Ensure that the 1" air space clearance is maintained on the sides of the fireplace. See Figure 13.3.

Figure 13.1 Nailing Tabs Shipping Position

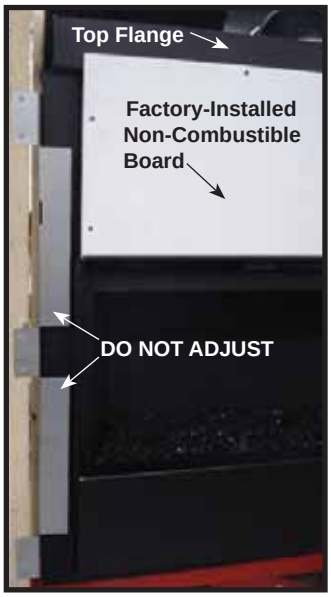


Figure 13.2 Nailing Tabs Installation Position

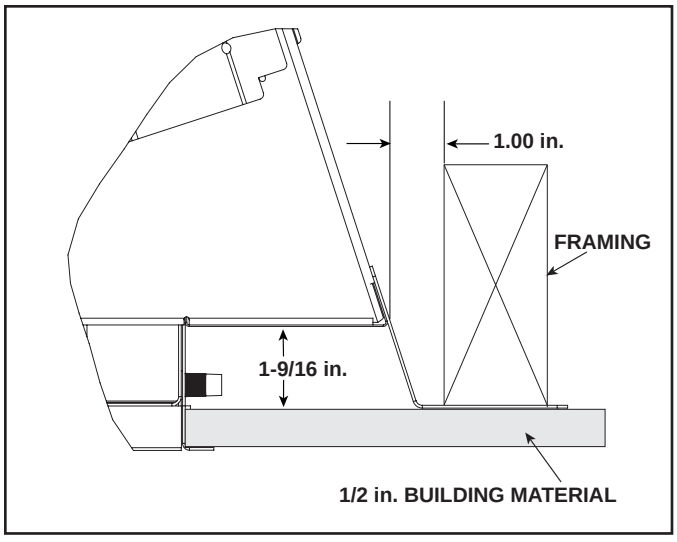


Figure 13.3 Front Side Finishing Detail

***WARNING! Risk of Fire!* Maintain specified air space clearances to combustibles.**

Failure to comply with these instructions may cause a fire or cause the appliance to overheat.

Ensure that the one inch back clearance and one inch side clearances are maintained.

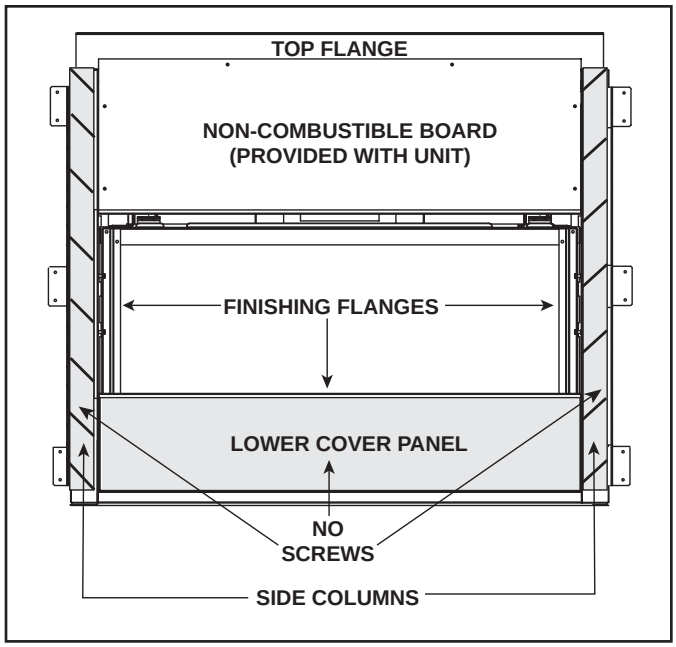


Figure 13.4 Finishing Details

CAUTION! RISK OF GLASS DAMAGE AND CUTS! DO NOT DRILL OR INSTALL ANY TYPE OF SCREW OR FASTENER INTO THE LOWER COVER PANEL. SHARP SCREW OR FASTENER TIPS MAY PENETRATE AND BREAK THE GLASS OR CAUSE CUTS.

The SLR can be finished using either the Tonic or Martini decorative fronts. See Figures 13.17 and 13.18. Depending on the decorative front, the final fireplace installation can be accomplished by either the "overlap" or "inside-fit" method. Reference Section 13.C regarding installation details associated with the Inside and Overlap Fit methods.

If the final fireplace installation uses the Overlap Method, wall sheathing material ½" thick is specified and can be installed tight to the side finishing flanges. If the final fireplace installation uses the Inside-Fit Method, additional clearance of 4" must be maintained between combustible ½" thick wall sheathing material and the side finishing flanges. Reference Section 13.C regarding installation details associated with the Inside and Overlap Fit methods.

When finishing the wall around the fireplace, it is critical that wall sheathing be fastened properly. Wall sheathing fasteners, such as screws or nails, are not permitted in some locations. See Figure 13.4. It is acceptable to pre-drill holes and use self-tapped screws in the factory-installed non-combustible board which may be used to lathe (a backer for tile, marble, etc.) Screws being installed through the factory-installed non-combustible board should be self-tapping type with a minimum length of 5" and maximum length of 7". It is also acceptable to penetrate the top flange with self-tapping screws. See Figure 13.4. Do not drill or install screws into the side columns as the existing stand-offs will support the wall sheathing. Do not drill or install screws which may penetrate the lower cover panel as this will restrict required access to the glass, battery-back-up, and remote receiver. See Figure 13.4.

The appliance is designed to accept ½" wall sheathing materials such as drywall, plywood, wood composites, or non-combustible materials. The type of material used depends whether the installation is an Inside or Overlap Fit method. Reference Section 13.C regarding installation details associated with the Inside an Overlap Fit methods. The left/right sides and bottom of the fireplace opening include finishing flanges that will interlock with ½" wall sheathing. See Figure 13.4. The ½" thick wall sheathing can be installed tight to the left, right, and bottom finishing flanges such that the rough edges of the sheathing are tucked behind the flanges. See Figure 13.5. It is necessary to cut a ½" slot in the sheathing where it is tucked tightly behind the lower finishing flange. See Figure 13.7.

Verify that the lover cover panel is installed correctly, and that the fireplace opening height is 16 in. See Figure 13.6.

NOTE: It is acceptable to use a high temperature silicone sealant to adhere drywall to lower cover panel.

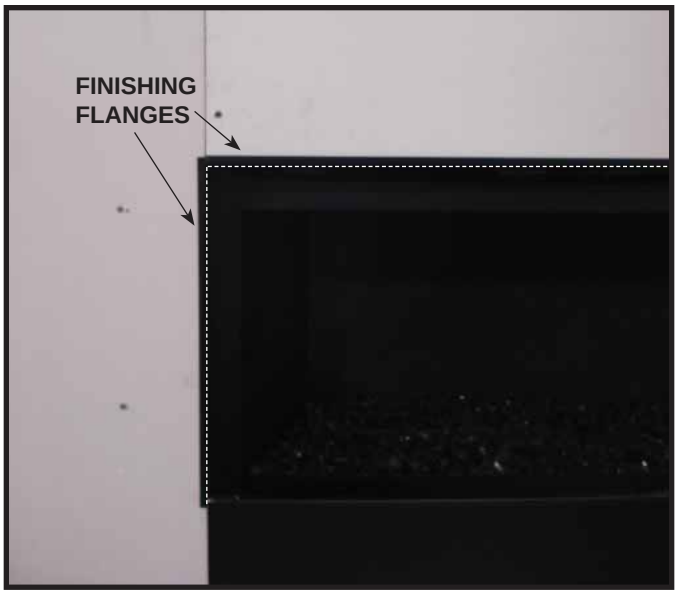


Figure 13.5 Side Wall Sheathing Installed

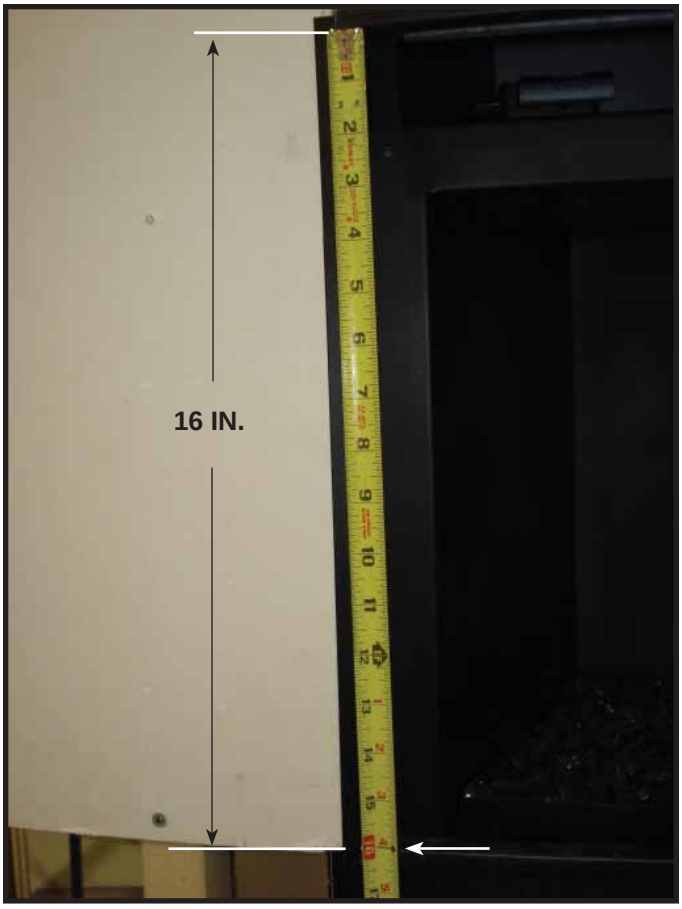


Figure 13.6 Confirm Fireplace Opening Dimension

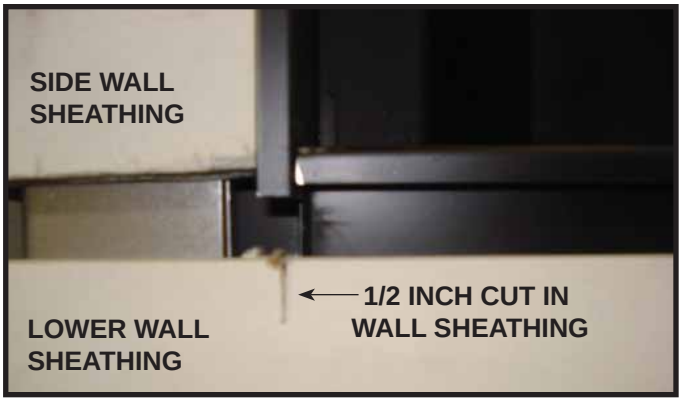


Figure 13.7 Lower Drywall Detail

Sealing Joints

The joints between the drywall sides and drywall above the top factory installed non-combustible board CAN NOT be sealed with a combustible drywall tape. Depending upon the final finishing method, use a minimum rated 300 degree sealant, drywall compound, or thin set to seal the side and top joints.

B. Mantel and Wall Projections

WARNING! Risk of Fire! *Comply with all minimum clearances to combustibles as specified. Framing closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.) Failure to comply could cause fire.*

Note: For non-combustible fireplace finish material (marble, stone, etc) specifications refer to Figure 13.13 and Figure 13.15.

Combustible Mantels

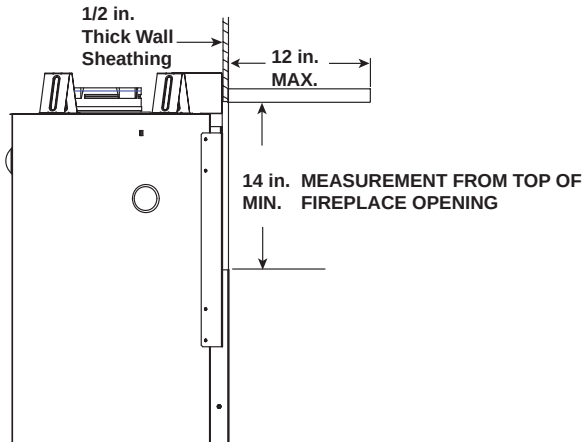


Figure 13.8 Clearances To Combustibles Mantels Or Other Combustibles Above Appliance

Non-combustible Mantels

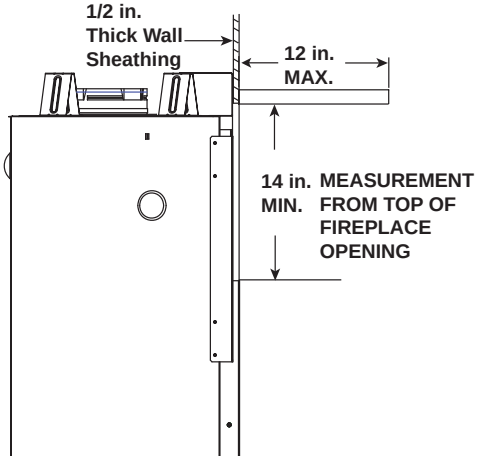


Figure 13.9 Clearances To Non-Combustible Mantels Or Other Non-Combustibles Above Appliance

Combustible Mantel Legs Or Wall Projections Extending Past The Face Of The Fireplace

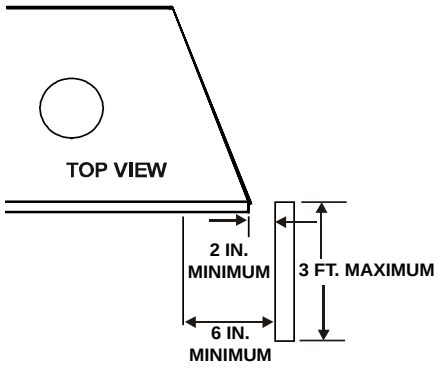


Figure 13.10 Combustible Mantel Leg or Wall Projections (Acceptable on both sides of opening)

Non-combustible Mantel Legs Or Wall Projections Extending Past The Face Of The Fireplace

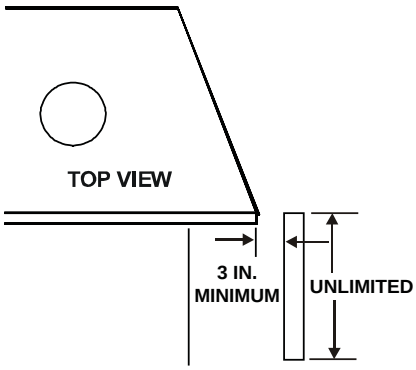


Figure 13.11 Non-Combustible Mantel Leg or Wall Projections (Acceptable on both sides of opening)

C. Facing Material

- Facing and/or finishing materials must not interfere with air flow through louvers, operation of louvers or doors, or access for service.
- Facing and/or finishing materials must never overhang into the glass opening.
- Observe all clearances when applying combustible materials.

***WARNING! Risk of Fire! DO NOT** apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite and will interfere with proper operation of doors and louvers.*

***WARNING! Risk of Fire! DO NOT** install drywall or other combustible materials over the factory-installed non-combustible board. Overlapping materials could ignite.*

Decorative facing material thickness is measured from the face of the factory-installed non-combustible board. See Figure 13.12 and Figure 13.14.

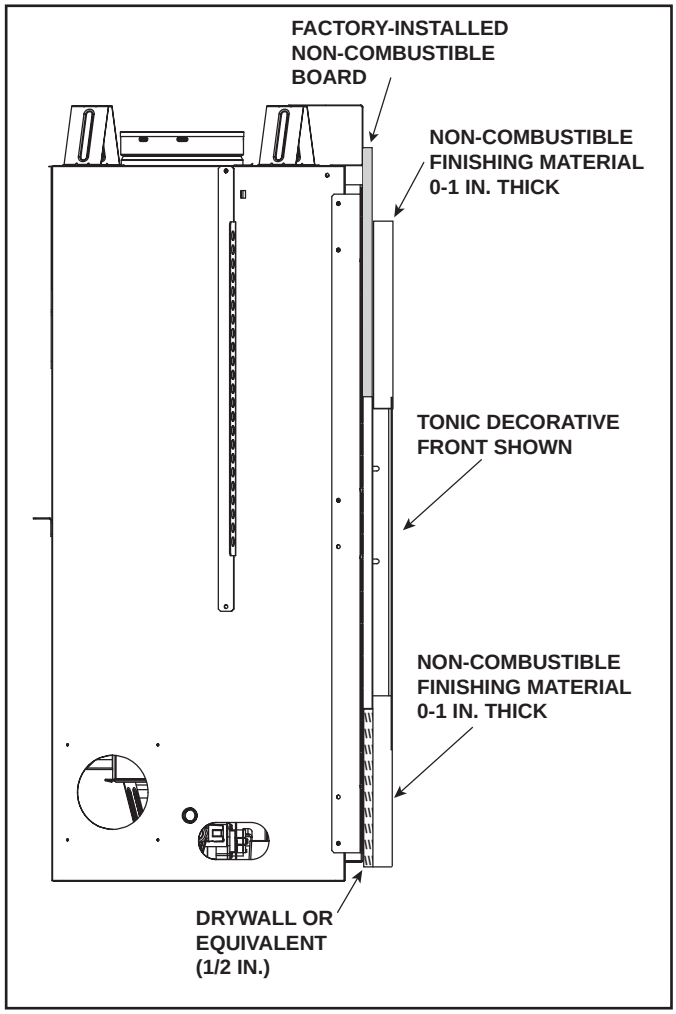


Figure 13.12 Overlap Fit Method (Tonic or Martini Decorative Front)

Both the Tonic and Martini decorative fronts can be installed such that they overlap non-combustible materials up to 1 in. thick. See Figure 13.12 and Figure 13.13.

Additionally, the Tonic is approved to be installed in an inside fit application with up to 4 in. of non-combustible material up to 4 in. thick. See Figure 13.14, Figure 13.15 and Figure 13.16.

Please refer to the appropriate section for specific requirements for each method if installation. See Figure 13.17 and Figure 13.18 for decorative front identification.

Non-Combustible Finish Materials
0 - 1 inch thickness-Overlap Fit Method

Both the Tonic and Martini decorative fronts are designed to overlap finish materials 0 inches to 1 inch thick. See Figure 13.12.

***NOTICE:** This one inch maximum not only includes the decorative finish materials (marble, tile, slate, etc) but also the thinset, lath and adhesive used to attach the decorative finish material*.

The non-combustible finish material can be installed up to the 16 inch (height) by 43 inch (width) fireplace opening.

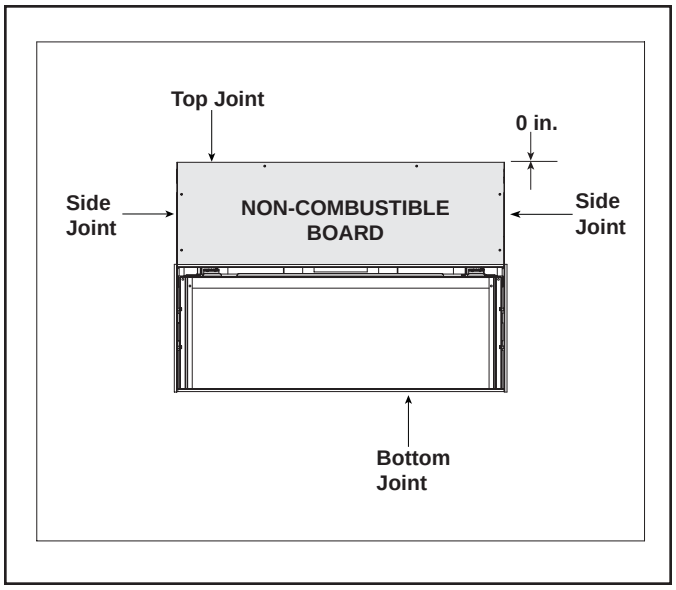


Figure 13.13 Non-Combustible Finish Material Diagram for 0-1 Inch Thick Overlap Fit Method (Tonic or Martini Decorative Front)

Non-Combustible Finish Materials
0 Inches to 4 Inches Thick Inside Fit Method

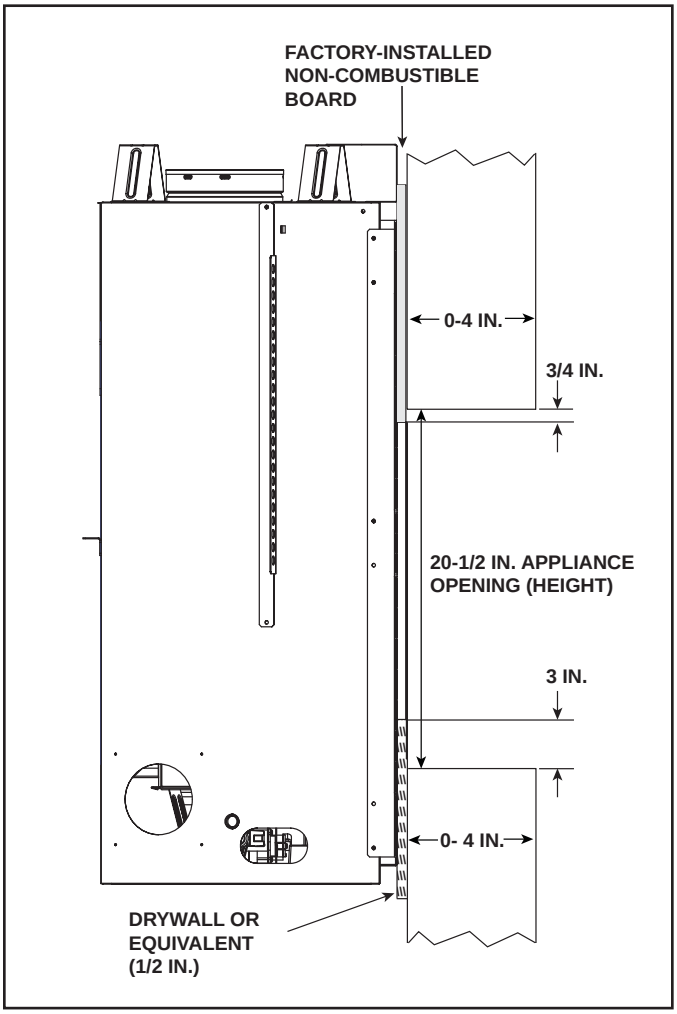
Note: The Inside Fit application is only approved for the Tonic decorative front.

The Tonic decorative front is approved for inside fit applications. Non-combustible finishing materials up to 4 inches thick can be installed around the Tonic front (left, right, top, and bottom). The inside fit method requires an additional 4 in. of 1/2 in. thick non-combustible building material (not supplied with fireplace) to be installed on the left and right sides flush with the factory installed non-combustible board. See Figure 13.15.

WARNING! Risk of Fire! *The Martini decorative Front is not approved for inside fit installations.* ***DO NOT*** *install Martini decorative front using an inside fit application. Resulting elevated \temperatures may cause overheating and fire.*

For the Tonic decorative front inside fit applications, the decorative front must be installed tightly to the finishing flanges and must not overlap any finish material.

Ensure that no non-combustible finish materials are installed within 3/4 in. of the fireplace opening. The 3/4 in. spacing is required to provide clearance for removing and installing the Tonic decorative front. See Figure 13.16.



➔ **Figure 13.14 Inside Fit Method (Tonic Decorative Front Only)**

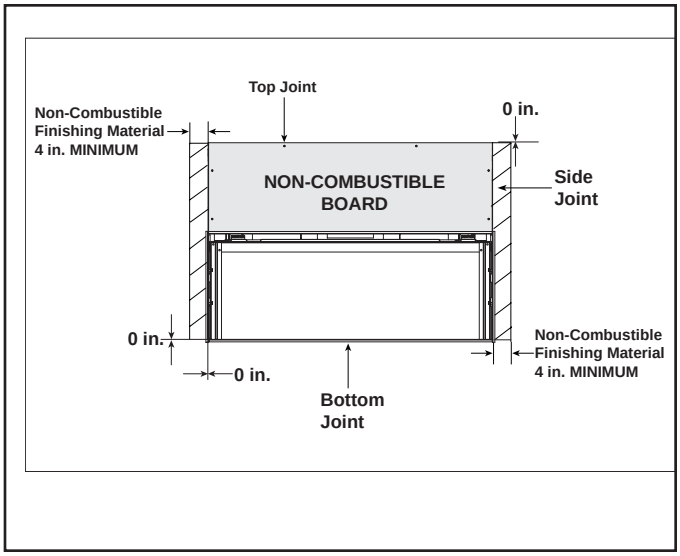


Figure 13.15 Noncombustible Surface Finishing Material 0-4 Inches Thick-Inside Fit Method (Tonic Decorative Front Only)

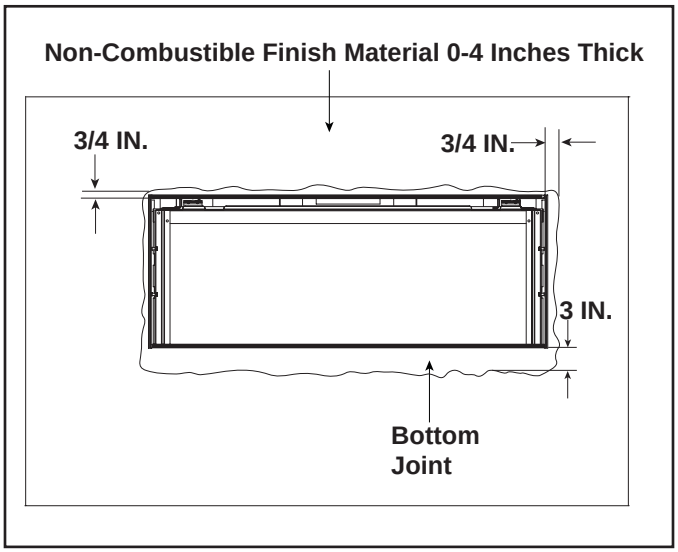


Figure 13.16 Noncombustible Surface Finishing Material 0-4 Inch Thick-Inside Fit Method (Tonic Decorative Front Only) ←

D. Decorative Fronts

WARNING! Risk of Fire! *A decorative front is required for this model. DO NOT operate this appliance without a decorative front in place.*

Only doors certified for use with this appliance model may be used. Contact your dealer for a list of doors that may be used.

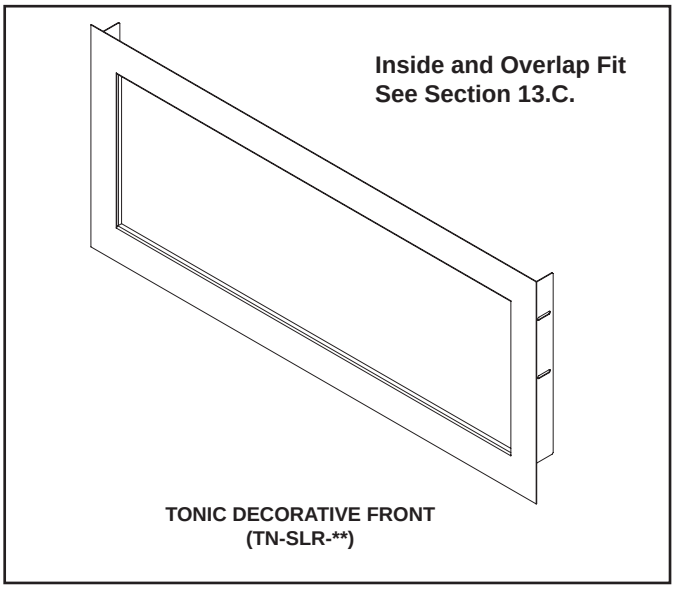


Figure 13.17 Tonic Decorative Front

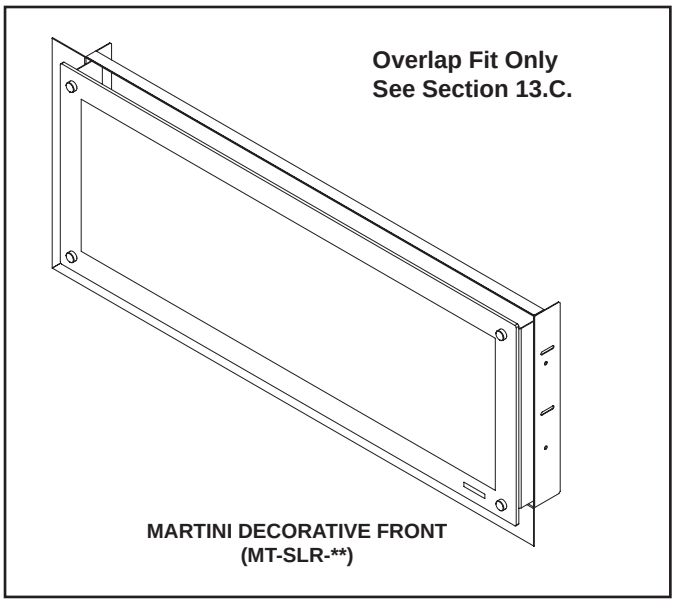


Figure 13.18 Martini Decorative Front

The tinted glass on the Martini Decorative Front meets the tempered glass specifications in Section 1.B of this installation manual.

14 Appliance Setup

A. Remove Fixed Glass Assembly

See Section 14F.

B. Remove the Shipping Materials

Remove shipping materials from inside or underneath the firebox. The standard black rock media and manual bag assembly are also shipped underneath the firebox.

C. Clean the Appliance

Clean/vacuum any sawdust that may have accumulated inside the firebox or underneath in the control cavity.

D. Accessories

Install approved accessories per instructions included with accessories. Install approved accessories per instructions included with accessories. Contact your dealer for a list of approved accessories.

WARNING! Risk of Fire and Electric Shock! *Use ONLY Hearth & Home Technologies-approved optional accessories with this appliance. Using non-listed accessories could result in a safety hazard and will void the warranty.*

E. Rock Media Instructions

CAUTION

Sharp Edges

- Wear protective gloves and safety glasses during installation.

Cleaning the Rock

During shipment of the Rock Media, dust and debris can accumulate. It is recommended that the Rock Media be rinsed thoroughly with water to remove dust and small glass particles. An easy method to clean the Rock Media is to dump the rocks into a bucket and rinse thoroughly with a garden hose. Allow the rocks to dry before installing them into the fireplace.

INSTALLATION

1. Choose 7 - 10 flat, quarter-sized, pieces of Rock Media and set them aside. These will be used later to conceal the pilot cover. Reference Figure 14.1 for choosing flat pieces of glass.

Figure 14.1. Selecting Flat Rocks for Pilot Cover.

⚠ WARNING

Delayed Ignition Risk

- Place stones according to instructions.
- Do NOT place stones in area in front of pilot or between burner tracks.
- Do NOT place stones in a position that they may fall into area in front of pilot.
- Do NOT use any media other than the stones supplied with this fireplace.
- Do NOT use more than one 10 lb. bag of rock media per fireplace.

Fireplace will not function properly.
Delayed ignition may occur.

2. Place an even layer of decorative rock around the base pan as shown in Figure 14.2. Do not place rocks in the slot over the burner ports. See Figures 14.2 and 14.3. This may cause lighting issues, undesirable burner flame, or delayed ignition.

Figure 14.2. Place Rock Media

***WARNING! Risk of Fire. DO NOT** place rock media directly in front of the pilot assembly or between the burner tracks over the burner ports..*

3. Figure 14.4 shows an outline of the area in front of the pilot assembly. No rock media may be placed in the outlined area. Continue to place an even amount of Rock Media over the entire base pan. **DO NOT** install Rock Media in between the tracks over the entire length of the burner.

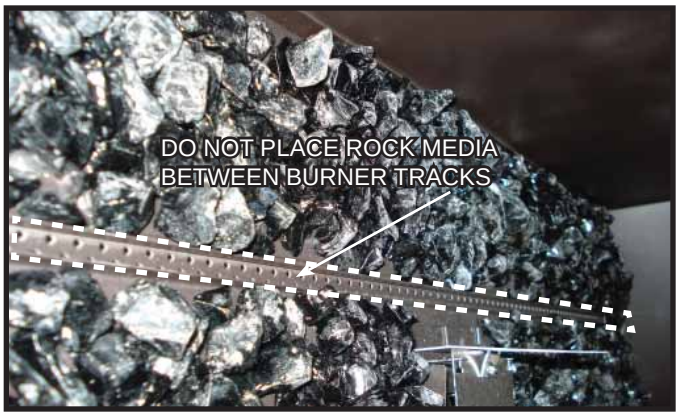


Figure 14.3. Burner Tracks

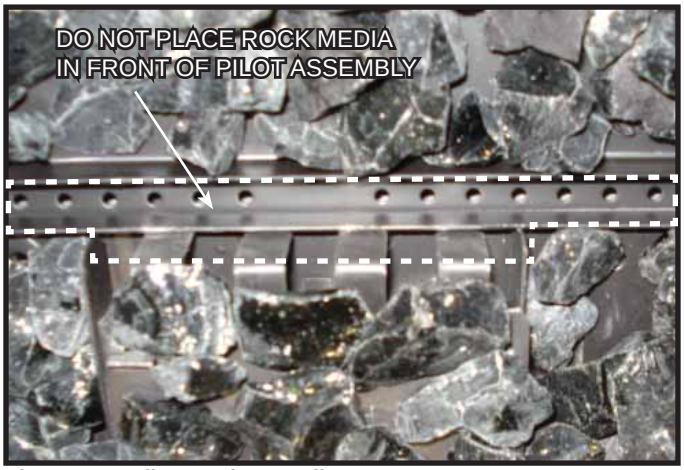


Figure 14.4. Pilot Bracket Detail

4. The rock media placement jig must remain in place while media is placed on the basepan and around the pilot bracket.
5. Remove the rock media placement jig by removing the screw as noted in Figure 14.5.

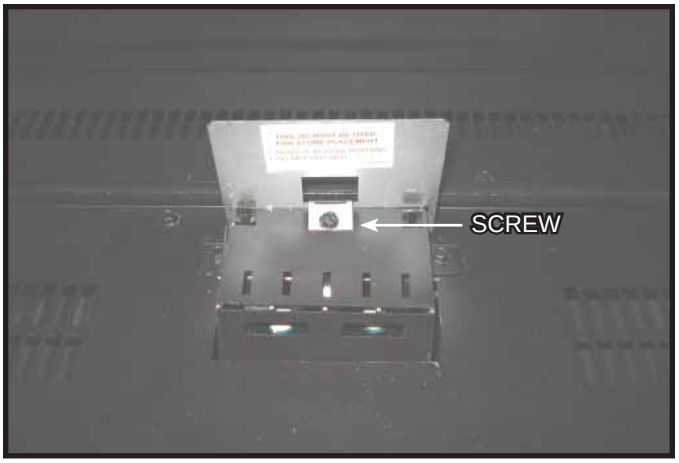


Figure 14.5. Remove Screw

6. Place the flat pieces of Rock Media that were sorted out in Step 1, carefully hide the pilot cover. See Figures 14.6 and 14.4.

Figure 14.6. Place Flat Pieces of Rock Media

F. Fixed Glass Assembly

WARNING! Risk of Asphyxiation! *Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.*

- ***DO NOT** strike, slam or scratch glass.*
- ***DO NOT** operate fireplace with glass removed, cracked, broken or scratched.*
- *Replace as a complete assembly.*

Removing Fixed Glass Assembly

1. Remove the decorative front.
2. Locate the two spring latches that are on the upper left and right of the fireplace.
3. Use both index fingers to release spring latches. See Figure 14.3.
4. Allow glass to tilt forward. Grasp glass on the upper right and left sides and lift glass “up” and “out.”

Replacing Fixed Glass Assembly

1. Locate glide tabs on lower left and right corners.
2. Grasp glass on upper right and left sides and tilt bottom of glass assembly toward fireplace.
3. Allow of the bottom gasketing of the glass assembly to touch the face of the fireplace.
4. Put pressure on the glass as you allow the glass assembly to drop into the two lower glass clips. See Figure 14.3.
5. Tilt top of glass towards fireplace and engage both top spring latches

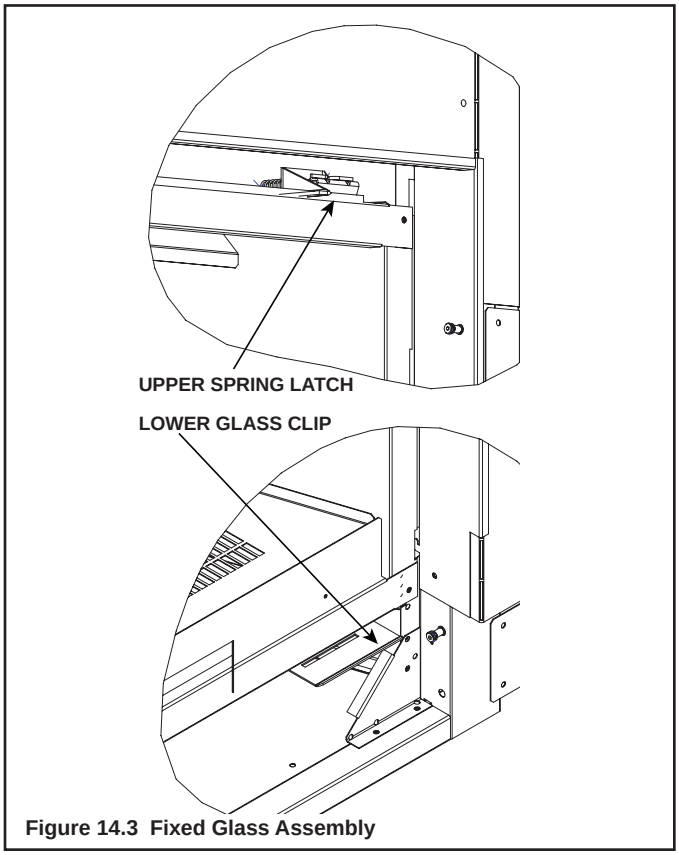


Figure 14.3 Fixed Glass Assembly

G. Install the Mesh

The mesh front is included with the Tonic front. The Martini tinted glass front does not include mesh.

1. Remove fixed glass assembly as instructed.
2. Place glass assembly into mesh screen such that the four mesh clips attached to the mesh assembly snap into the four corresponding slots on the fixed glass assembly.

H. Air Shutter Setting

Air shutter settings may be adjusted by a qualified installer at the time of installation. The air shutter is set at the factory for minimum vertical vent run. Adjust air shutter for longer vertical runs. See Figure 14.4.

- Loosen the 1/4 in. screw.
- Twist shutter to adjust
- Shutter may be open for longer horizontal vent runs.
- Do not close the air shutter more than 1/16 in. for NG or 5/16 in. for LP.
- Tighten the screw.

***NOTICE:** If sooting occurs, provide more air by opening the air shutter.*

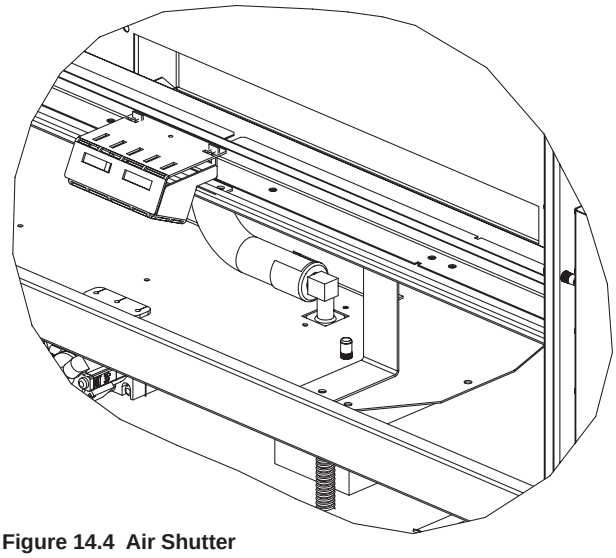


Figure 14.4 Air Shutter

Air Shutter Settings

	NG	LP
SLR	1/16 in.	5/16 in.

15 Troubleshooting

With proper installation, operation, and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service technician in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician. Contact your dealer to arrange a service call by a qualified service technician.

A. Intellifire Ignition System

Symptom	Possible Cause	Corrective Action
1. Pilot won't light. The ignitor/module makes noise, but no spark.	a. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly.
	b. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Verify connections underneath pilot assembly are tight; also verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	c. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .17 in. or 1/8 in. (3 mm).
	d. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place a grounded wire about 3/16 in. (5 mm) away from "I" terminal on module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode. Replace pilot if necessary.
2. Pilot won't light, there is no noise or spark.	a. No power or transformer installed incorrectly.	Verify that transformer is installed and plugged into module. Check voltage of transformer under load at spade connection on module with ON/OFF switch in ON position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts AC.
	b. A shorted or loose connection in wiring configuration or wiring harness.	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Remove and verify continuity of each wire in wiring harness. Replace any damaged components.
	c. Improper wall switch wiring.	Verify that 110/VAC power is "ON" to junction box.
	d. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
	e. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
3. Pilot sparks, but Pilot will not light.	a. Gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits, inlet pressure must not exceed 14 in. W.C.
	b. Ignitor gap is incorrect.	Verify that spark gap from ignitor to pilot hood is .17 in. or 1/8 in (3 mm).
	c. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
	d. Module voltage output / Valve/Pilot solenoid ohms readings.	Verify battery voltage is at least 2.7 volts. Replace batteries if voltage is below 2.7.

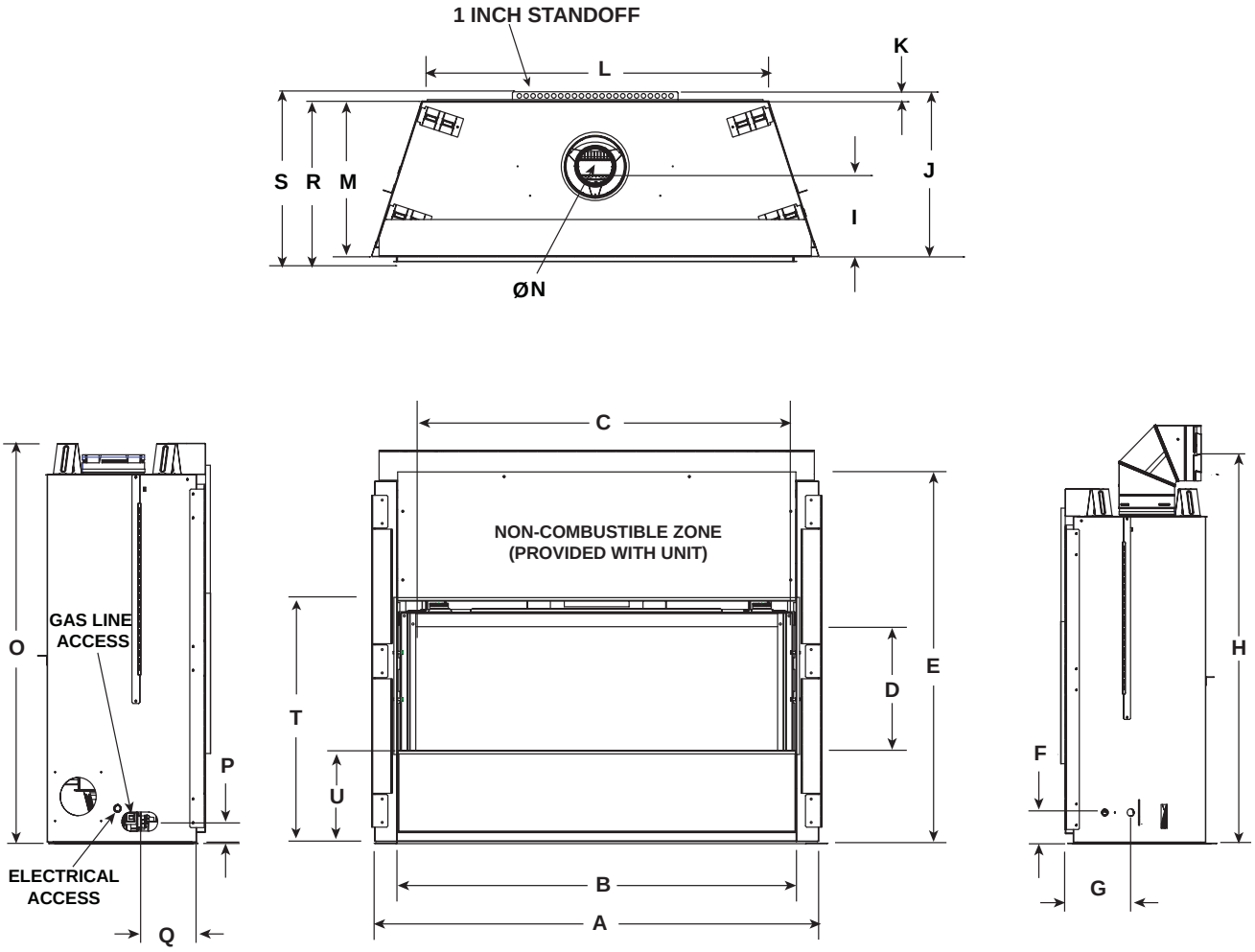
Intellifire Ignition System - (continued)

Symptom	Possible Cause	Corrective Action
4. Pilot lights but continues to spark, and main burner will not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)	a. A shorted or loose connection in flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	b. Poor flame rectification or contaminated flame sensing rod.	With fixed glass assembly in place, verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod.
	c. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to the module.
	d. Damaged pilot assembly or contaminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multimeter with ohms set at lowest range. Replace pilot if any damage is detected.
	e. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire “I” from module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at “I” terminal module must be replaced. If there is a spark at “I” terminal, module is fine.

16 Reference Materials

A. Appliance Dimension Diagram

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 5. ←

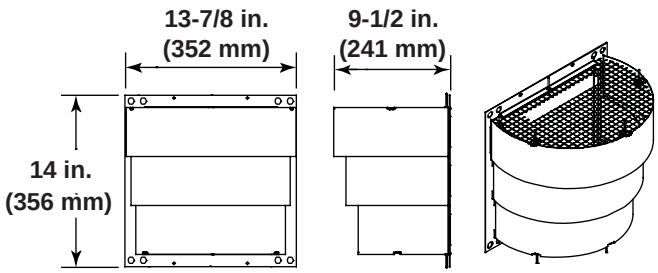


Location	Inches	Millimeters
A	48	1218
B	43	1092
C	39-1/16	993
D	13-1/4	337
E	39-5/8	1006
F	3-9/16	90
G	6-7/8	174
H	47-1/16	1195
I	9-5/16	237
J	16-3/4	425

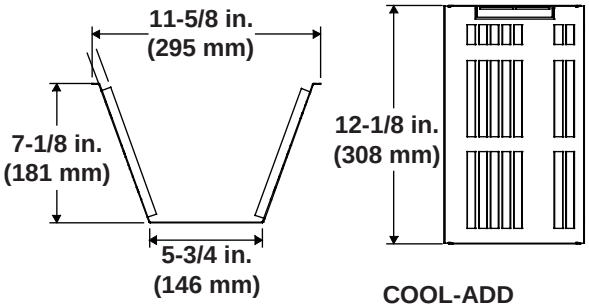
Location	Inches	Millimeters
K	1	25
L	37-3/4	959
M	15-3/4	400
N	6-5/8	168
O	41-3/4	1060
P	2-3/16	55
Q	6	152
R	17-1/4	438
S	18-1/4	464
T	25-7/8	657
U	9-3/4	248

Figure 16.1 Appliance Dimensions

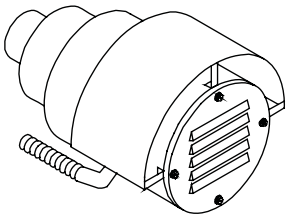
B. Vent Components Diagrams



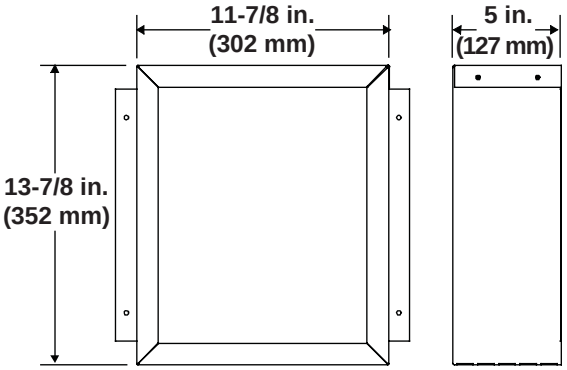
DRC-RADIUS
Cap Shield



COOL-ADD
Cap Shield



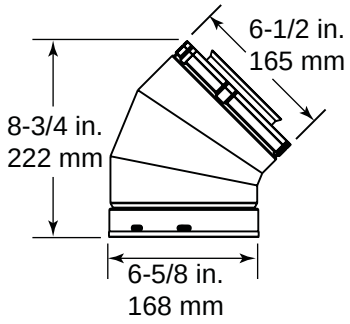
PVK-80
(For use with IPI and DSI appliances only.)



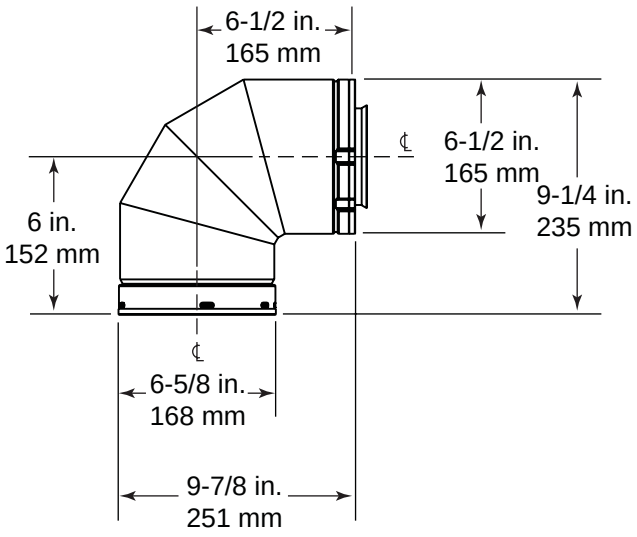
DVP-BEK2
DVP-HPC Cap Brick Extension

Figure 16.2 DVP vent components

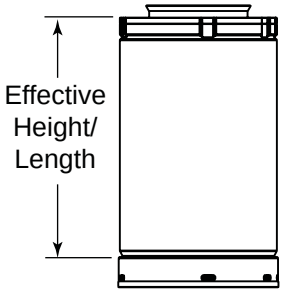
B. Vent Components Diagrams *(continued)*



SLP-45 - 45° Elbow



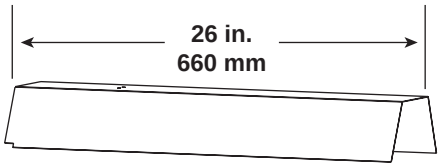
SLP90- 90° Elbow



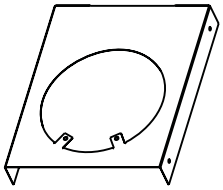
SLP-PIPE

Effective Height/Length

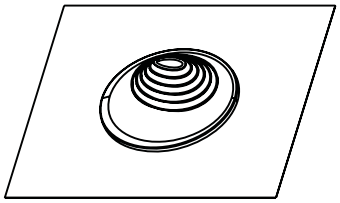
Pipe	*inches*	*mm*
SLP4	4	102
SLP6	6	152
SLP12	12	305
SLP24	24	610
SLP36	36	914
SLP48	48	1219
SLP6A	2 - 6	51 - 152
SLP12A	2 - 12	51 - 305



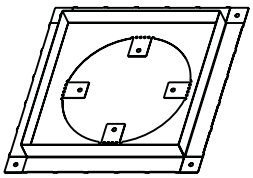
DVP-HSM-B
Extended Heat Shield



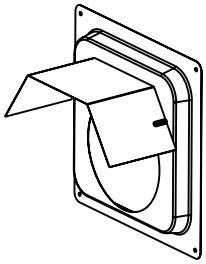
SLP-HVS
Horizontal Pipe
Support



RF4-8
Roof Flashing



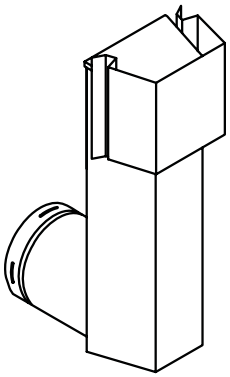
SLP-FS
Ceiling Firestop



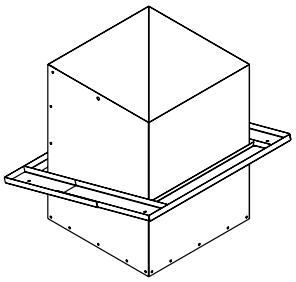
SLP-WS
Wall Shield Firestop

Figure 16.5 SLP Series Vent Components

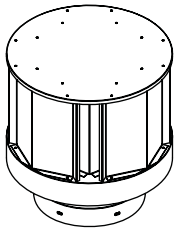
B. Vent Components Diagrams *(continued)*



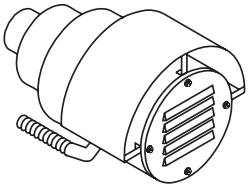
SLK-SNKD
Snorkel
Termination Cap



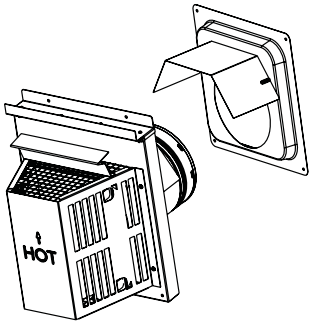
SLP-CCS-BK
Cathedral Ceiling
Support Box-Black



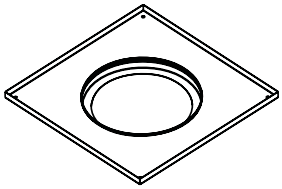
SLP-TVHW
Vertical
Termination Cap



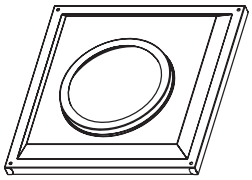
PVK-80
Power Vent



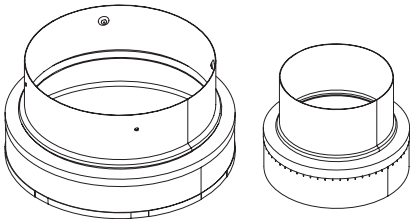
SLP-TRAP2
Horizontal
Termination Cap



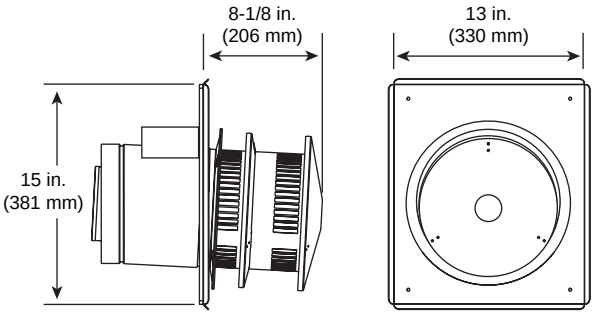
SLP-DCF-BK
Ceiling Firestop
Black

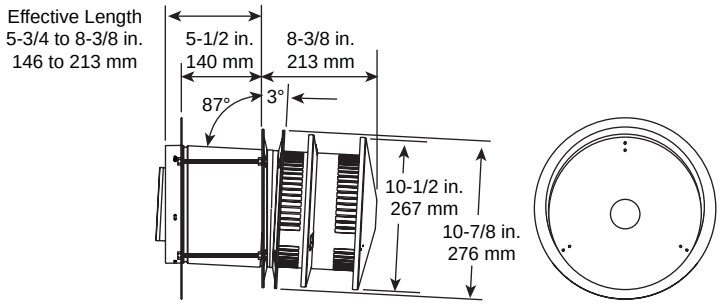


SLP-WT-BK
Wall Thimble-Black



SL-2DVP
Adapter

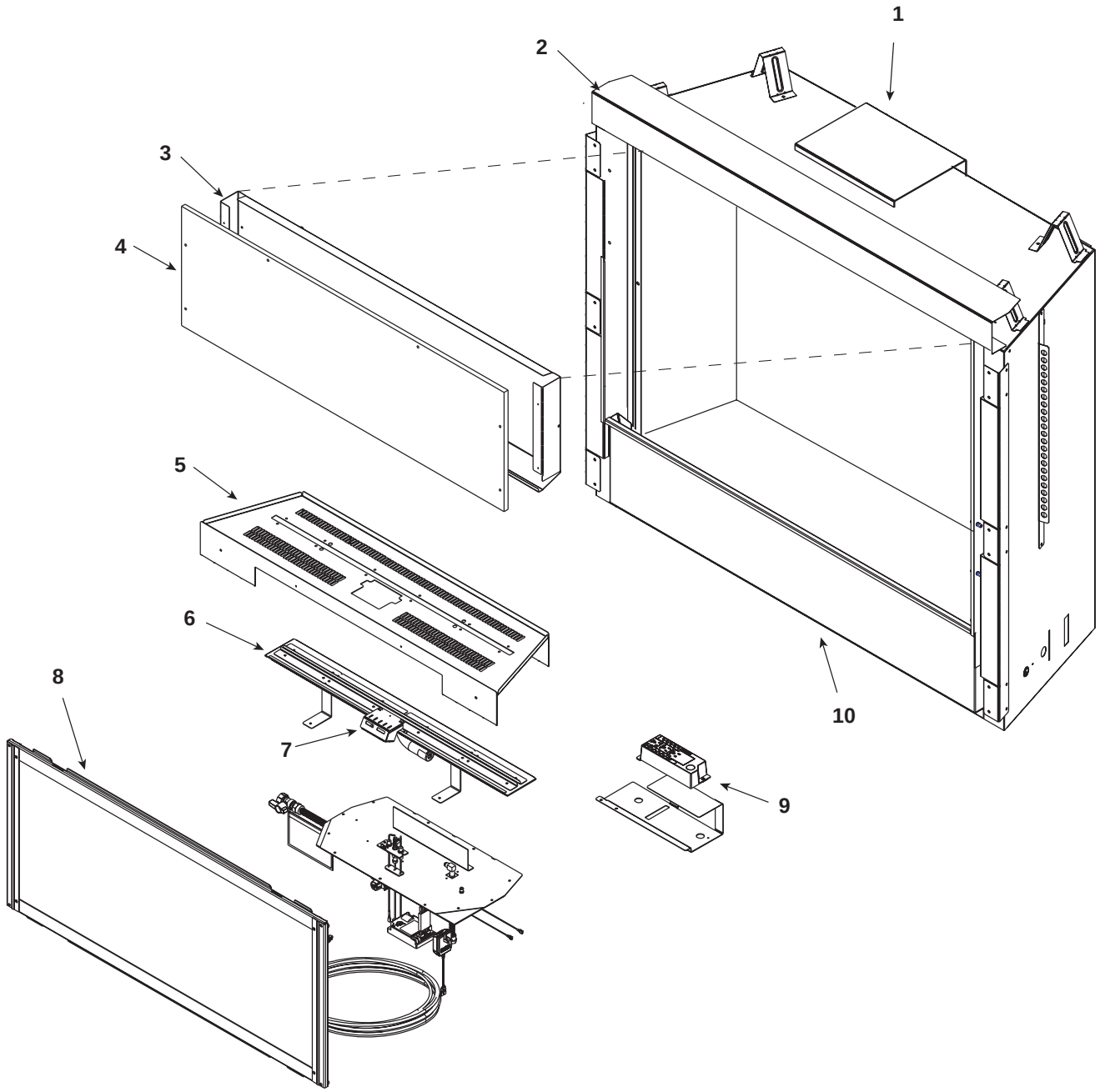




Note: The SLP-HRC-SS and SLP-HRC-ZC-SS termination caps are not approved for use with propane (LP) fuel.

SLP-HRC-SS
SLP-HRC-ZC-SS
HORIZONTAL TERMINATION CAP

Figure 16.6 SLP Series Vent Components



Part number list on following page.

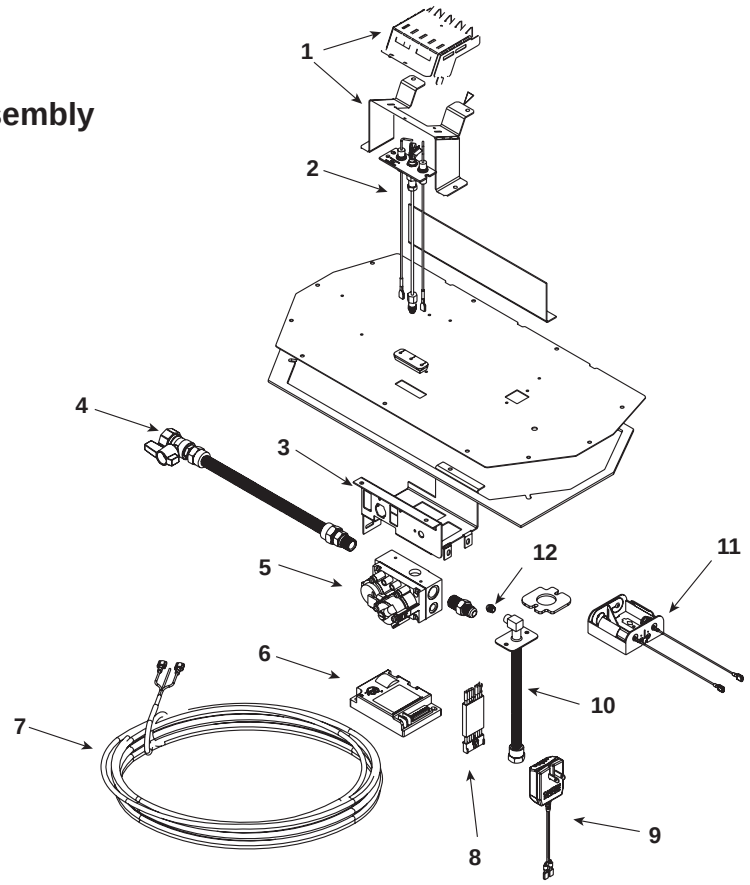
C. Service Parts List

IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
1	Elbow Heat Shield		2143-168	
2	Sheet Rock Ledge		2143-147	
3	Top Panel, Finishing Edge		2143-102	
4	Non Combustible Board		2143-117	
5	Base Pan		2143-115	
6	Burner NG		2143-007	**Y**
	Burner LP		2143-008	**Y**
7	Pilot Bracket		2143-123	
8	Glass Door Assembly		GLA-SLR	**Y**
9	Junction Box		4013-021	**Y**
10	Lower Cover Panel		2143-103	
	12 in Pipe		SLP12	
	Black Rock	10 LB Bag	2143-850	
	Gasket Assembly Contains burner neck, shutter bracket, vent, seal cap, valve plate, and air passage gaskets		2121-080	
	Glass Latch Assembly	Qty 2 req	386-122A	**Y**
	Finish Edge	Right	2143-118	
		Left	2143-169	
	Touch Up Paint		203-9	
	Wall Switch Kit		WSK-21	
	Conversion Kit NG		N/A	
	Conversion Kit LP		LPK-SLR	**Y**
	Pilot Orifice NG		593-528	**Y**
	Pilot Orifice LP		593-527	**Y**
	Regulator NG		NGK-DXF	**Y**
	Regulator LP		LPK-DXF	**Y**

Additional service part numbers appear on following page.

IPI Valve Assembly



IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
1	Pilot Bracket Kit		SRV2143-174	
2	Pilot Assembly NG		2090-012	Y
	Pilot Assembly LP		2090-013	Y
3	Valve Bracket		2118-104	
4	Flex Ball Valve Assembly		302-320A	Y
5	Valve NG		593-500	Y
	Valve LP		593-501	Y
6	Module		593-592	Y
7	Thermostat Wire Assembly		2118-170	Y
8	Module Wire Assembly		593-590A	Y
9	3 Volt Transformer		593-593A	Y
10	Bulkhead W/Flex Tube		7000-156	Y
11	Battery Pack		593-594A	Y
12	Orifice NG (#42C)		582-842	Y
	Orifice LP (.057C)		582-057	Y
	Jumper Wires 21 in		2012-206	Y

D. Contact Information

HEAT&GLO™

No one builds a better fire

Heat & Glo, a brand of Hearth & Home Technologies Inc.
7571 215th St., Lakeville, MN 55044
www.heatnglo.com

Please contact your Heat & Glo dealer with any questions or concerns.
For the location of your nearest Heat & Glo dealer,
please visit www.heatnglo.com.

- NOTES -

_____

_____

_____

_____

_____

_____

_____

_____

_____

NOTICE

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.

Printed in U.S.A. - Copyright 2008